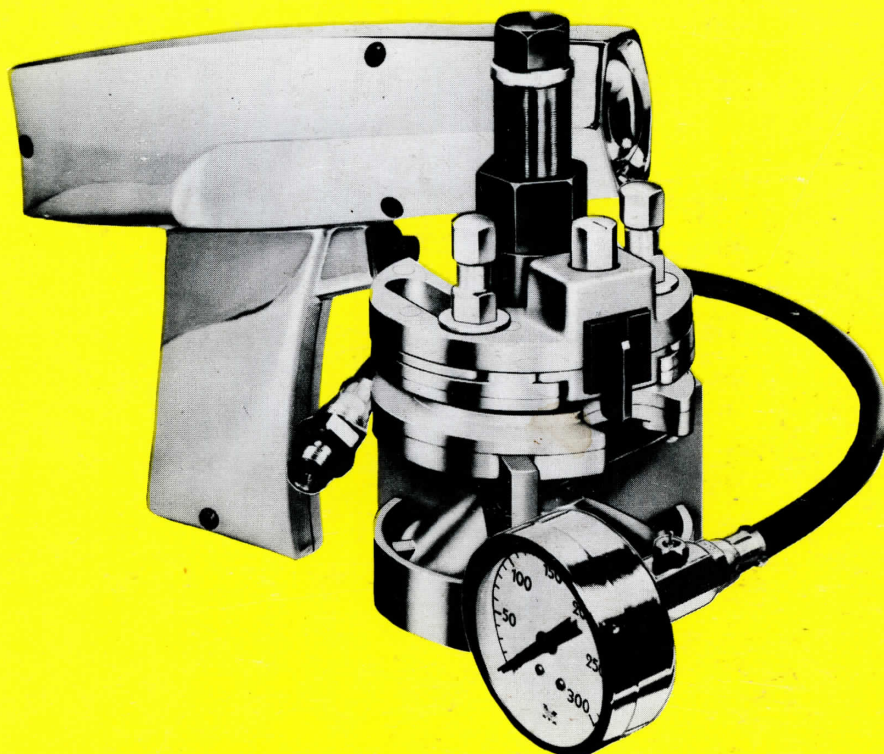


# HASTINGS

## SERVICE TOOLS



### —QUALITY TOOLS—

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The service tools listed in this section are designed for speed and accuracy in performing various repairs and adjustments on engines. You'll find the right tool for the job here:

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**POWER TIMING LIGHT**

for 6 and 12 volts  
operates from car battery

A rugged, trouble free and long lasting timing light with a brilliant white beam focused to the correct distance. Components are shock-mounted in a well balanced, easy to grip all metal case.

For use with 6 and 12 volt batteries in Domestic and foreign cars.



No. 1664

**HIGH SPEED, D.C. POWER TIMING LIGHT**

Solid state design for a brilliant white light under all lighting conditions. Operates on all 12 volt vehicles for timing at speeds from idle to 8000 R.P.M.

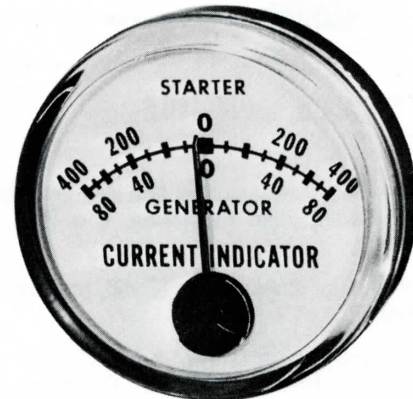
Electronic inductive pick-up enables hook up without disconnecting spark plug wires or stopping engine.



No. 1717

**STARTER AND GENERATOR CURRENT INDICATOR**

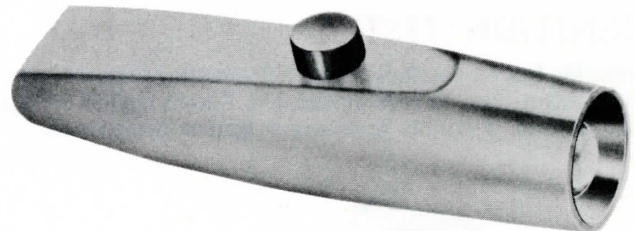
A handy 2-in-1 indicator for checking both starter draw and generator output. Simply hold it against the wire and make either test. No connections needed. Clear dial markings, two scales 80-0-80 and 400-0-400. A very useful—very handy tester.



No. 1368

**REMOTE STARTER SWITCH**

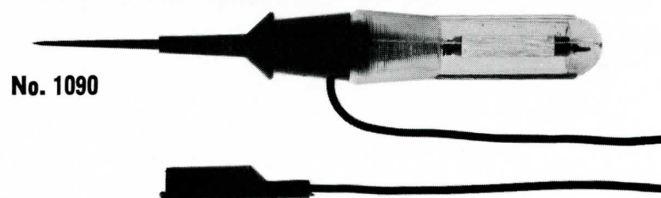
Heavy-duty remote starting switch features higher current carrying switch elements, heavy-duty cord and clips. Will easily work on jobs that burn out others. Also features a novel utility light in the end.



No. 1353

## TEST LIGHT

Used to check out 6-12 volt circuits with the power on. Flexible wire lead with ground clip. Sharp pointed steel prod pierces insulation without damage to wire. Uses standard replacement bulb. Hi-impac, no shock, plastic case.



No. 1090

## SOLID-STATE ENGINE ANALYZER

For complete diagnostic analysis and engine tune-up. Tests include Point Dwell, Point Resistance, Low RPM, High RPM, Amps, and Volts.

For 4, 6 or 8 cylinder engines, 6 or 12 volt, positive and negative ground systems.

Unbreakable Cyclac case 11-1/2" x 7-1/2" x 4-3/4". Jeweled d'Arsonval meter. Heavy-duty leads. Permanently calibrated at factory



No. 1724

## IGNITION TESTER

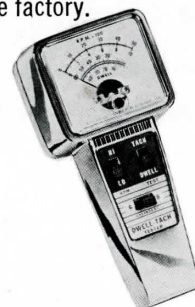
Versatile tool for checking and trouble-shooting the entire ignition system. Easy to hook up and use. Checks ignition voltage and current. Pinpoints problems in ignition components.



No. 1296

## DWELL-TACH TESTER

For use on 4, 6 or 8 cylinder engines, 6 or 12 volt ignition systems. No internal batteries—no preliminary calibration necessary. Permanently set at the factory.



No. 1578

## ALTERNATOR-GENERATOR REGULATOR TESTER

Tests both Alternator and Generator Systems. Simple two lead connection, plus ground for all tests. Checks 6 or 12 volt systems directly. Includes polarity reversing switch. Can be used as a regular volt-ammeter.

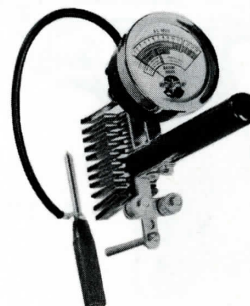


No. 1295

## HEAVY-DUTY BATTERY TESTER

Use for checking all 6 and 12 volt batteries—including side terminal. Read battery condition and charging voltage on the direct reading D'Arsonval meter. Use also to check voltage regulators, voltage-drops or corroded battery cables.

- Double Shunt Load—Can use either the 100 AMP or 200 AMP load to simulate starter draw on a light or heavy-duty car or truck battery for conclusive testing.
- Tests Faster—Heavy-duty flexible lead reaches up to 22 inches between terminals for greatest testing convenience.
- Color-Coded Dial—Large 3 1/2" meter is color-coded so anyone can quickly determine battery condition without the need to look up specifications.



No. 1366



## EXHAUST ANALYZER

Precision electronic unit quickly and accurately measures air/fuel ratio of gasoline and liquid gas engines. Features solid-state circuitry and remote sensor pick-up at the tail pipe.

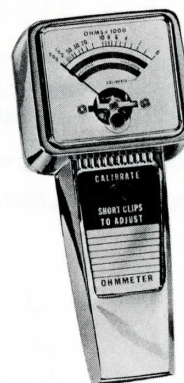


No. 1256

## OHMMETER

An essential tool for servicing automotive electrical systems. Invaluable for tune-up, alternator and generator repairs, and general automotive electrical work.

Designed and calibrated specifically for automotive applications.



No. 1254

## COIL-CONDENSER TESTER

Tests all standard automotive type coils, magneto coils and capacitive discharge coils. Includes test to determine if an open circuit exists within the coil or wiring harness. Also tests both standard automotive condensers as well as magneto condensers for shorts or opens, excessive series resistance or improper capacitance. 115V 50-60 CYCLE.

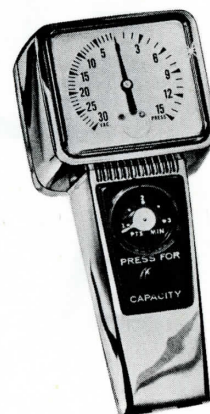


No. 1253

## FUEL PUMP TESTER

Checks fuel pump pressure and engine vacuum quickly and easily.

Also measures capacity in pints-per-minute at the touch of a button.



No. 1234

## 2/4 CYCLE PORTABLE SOLID-STATE ENGINE ANALYZER

\*IGNITION TEST—Measures ignition circuits maximum capabilities on both electric and manual start engines. Checks condition of points, coil, condenser and ignition wiring.

\*TACHOMETER—Two scales 0-2400; 0-12,000 RPM.

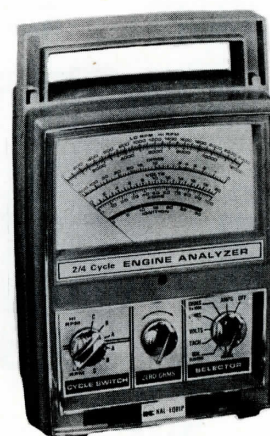
\*VOLTMETER—0-20 Volts.

\*OHMMETER—Two scales 0-500 and 0-500,000 OHMS.

\*AMPERES—0-10 Amps scale and 0-100 Amps with optional shunt.

Instruction manual and all necessary test leads and accessories are included:

Hastings exclusive 2/4 cycle engine analyzer will quickly and easily test all 2 and 4 cycle engines either battery or magneto operated . . . with or without flywheel magnetos or with built-in lighting coils. Checks the complete ignition and electrical systems. Solid-state circuitry for long-life dependability. Battery operated for totally portable operation.



No. 1579

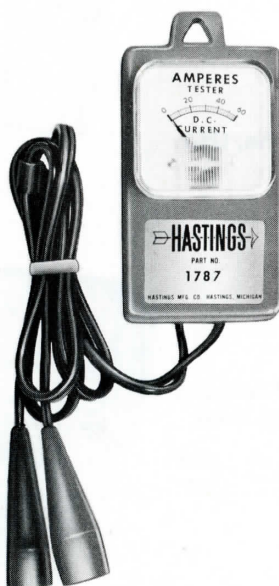
## AMPERAGE TESTER

Handy pocket-sized completely portable amperage tester. 0-60 amp scale provides range for testing all automotive accessories. Small size allows tests in hard to get to locations.

Handy bracket for hanging when not in use.

The case is made of rubber—won't scratch or mar automotive finishes.

**No. 1787**



## SPARK PLUG WIRE TESTER & OHM METER

This meter is one of the most useful tools you can own. It will test resistance spark plug wires quickly and accurately. It will make continuity tests including ignition coils. OHM meter range is from 0—100,000 OHMs. A single battery provides power. Extremely easy to use and comes complete with instructions. Size is 4½" x 2½" x 1½". Color coded scale is easy to read. Makes all of these tests and many more. Rubber case protects meter.

Coil Resistance  
Ignition Points  
Light Bulbs

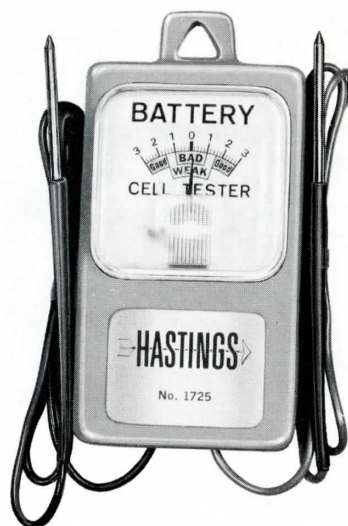
Radio Antennas  
Spark Plug Wire  
Relays

Diodes  
Switches  
Distributor Caps

**No. 1812**



**No. 1812E—Replacement Battery**



**No. 1725**

## BATTERY CELL TESTER

For testing cell voltage in hard case batteries where the connecting bars are not exposed. Remove cap and insert the probes into cells for simple fast reading.

Handy bracket for hanging when not in use.

The case is made of rubber—won't scratch car finish if placed on fender.



**No. 1786**

## VOLTAGE TESTER

Handy pocket-sized completely portable voltage tester. 0-16 volt scale is large enough to make voltage tests accurate to one tenth volt, while its capacity will serve all popular automotive applications. Small size allows tests in hard to get locations.

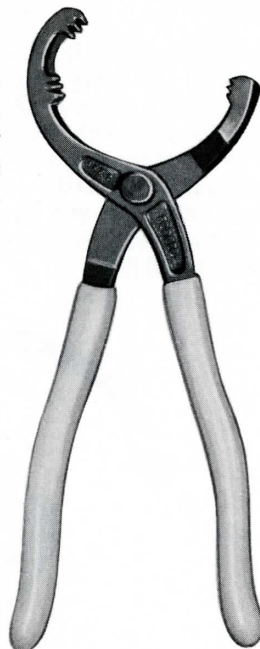
Handy bracket for hanging when not in use.

The case is made of rubber—won't scratch or mar automotive finishes.



## FUEL FILTER AND HOSE PLIERS

Removes 2 inch fuel filters, radiator hoses, front-wheel dust caps, master cylinder caps, and many other uses. Designed with 3 sets of teeth that give the grip that won't let go.

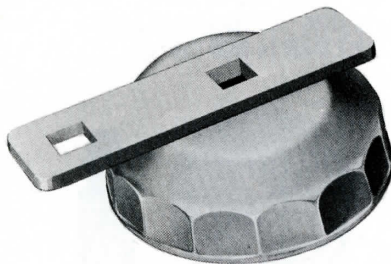


**No. 1796**

## OIL FILTER WRENCH

This is a fifteen-sided Cap Wrench which matches the contour of the oil filter. Can be used on filters with or without the attached nut. Has 2 openings for ratchet sliding T driver or hinge handle.

**No. 1873**



## HEAVY-DUTY FILTER WRENCHES

These heavy-duty filter wrenches will remove the tightest spin-on filters. The long handle gives more leverage than other models but is comfortable on the hands. The extra wide band grips securely and the cam action helps prevent slipping. These wrenches can also be used in reverse to safely tighten filters without damage. Available in three size models for everything from sub-compact cars to heavy-duty trucks and tractors.

**No. 1010 (Compact)  
No. 1011 (Standard)  
No. 1012 (Truck)**



## OIL FILTER PLIERS

Fits all filters 3 inch to 4½ inch diameter. Grabs oil filter at any angle—makes the tough job easy. Designed with 3 sets of teeth that give the grip that won't let go.

The handles on both models are extra long in proportion to jaw size. Handles are also coated with a soft plastic to protect your hands on a hard pull. Both pliers can be used for many other applications.



**No. 1797**

## OIL FILTER REMOVER FOR SPIN-ON FILTERS

The unusual design of this tool enables the mechanic to remove the oil filter from hard to get at places whether the obstructions are above, below, behind or in front of the filter. If an extension is needed or more leverage is necessary, any 3/8" square drive ratchet, hinge handle, or sliding "T" handle can be used. The more pressure on the wrench, the tighter it grips the filter. Black band with cadmium finish link. Fits popular, regular size spin-on filters. **Skin Packed for Display.**



**Nos. 1868-1869**

Identical in appearance to the larger model, the No. 1869 will handle the small diameter filters found on compacts and foreign applications. **Skin Packed for Display.**

## ENGINE VACUUM AND FUEL PUMP TESTER

Tester aids diagnosis of engine problems such as—sticky valves; timing; carburation; manifold leaks and faulty fuel pump.

Fuel pump range 15 lbs., Vacuum Range 30 inches. Zero adjustment for accurate measurement at low pressures.

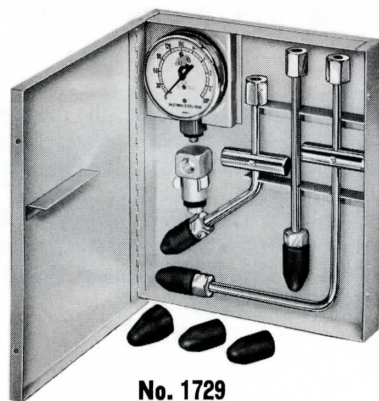
Three adapter fittings supplied. Complete instructions included.



No. 1728

## UNIVERSAL COMPRESSION TESTER KIT

This versatile compression tester is equipped with a gauge head and three interchangeable stems for use on virtually any engine. A short right angle adapter is also included. Also included are three styles of plug cones and a steel storage box. Gauge capacity is 300 lbs.



No. 1729



No. 1726

### POCKET SIZE

This high quality, accurate tester has an angle constructed tip to permit easy reading on back cylinders. Right angle adapter available. Gauge range to 300 lbs.

## FLEX-DRIVE COMPRESSION TESTER

This Flex hose compression tester is the most popular type in use today. The heavy duty, 16 inch neoprene hose will bend in all directions to reach those hard to get at cylinders. The tester comes complete with two spark plug adapters that will fit 14 and 18 mm plugs, long and short reach types and will also work on the smaller General Motors type spark plug. A handy side release valve lets you take multiple readings on the same cylinder without removing the tester from the cylinder. Gauge capacity is 300 lbs.

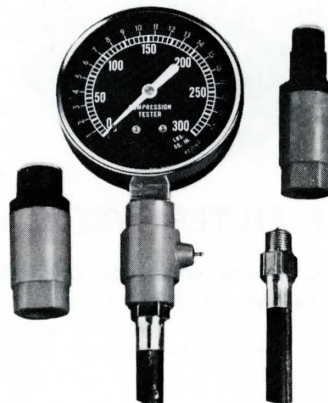


No. 1731

1731H 10MM Adapter  
1731J 12MM Adapter

## COMPRESSION TESTER

A "self-holding" compression tester. Operator merely puts tip into hole and internal mechanism takes over—holds even the highest compression. Two tips furnished fit all 14 MM and 18 MM applications. No special adapters needed. Flexible hose between tip and gauge makes it easy to use—easy to read. Large black-face dial. 300 pound capacity. Includes a 1352A 18 MM Tip and a 1352B 14 MM Tip.

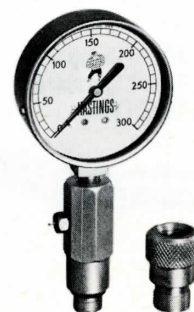


No. 1352

## SMALL ENGINES

Especially designed for small engines and has a side release valve for multiple tests. Tester is threaded for 14MM spark plugs. A 18MM adapter is available. Order separately.

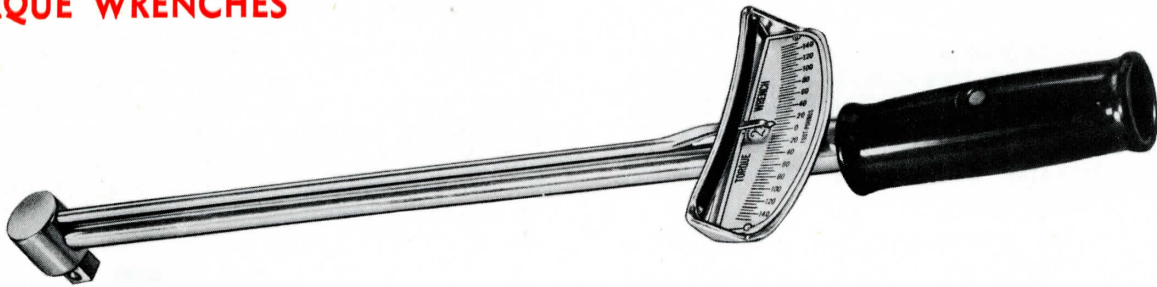
No. 1734V 18MM Adapter



No. 1727



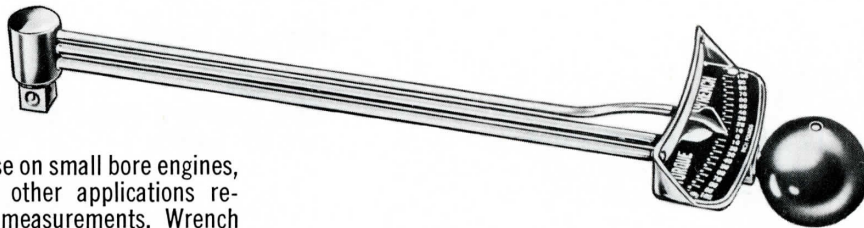
## TORQUE WRENCHES



Nos. 1686-1792

Available with Floating Head (1792) and Fixed Head (1686). Both have floating handles which allows accurate reading by eliminating twisting force. Specially finished alloy steel measuring bar assures lifetime accuracy. Special feature on the 1686 is the dual scale. Readings in foot pounds and metric kilograms.

PART NO.	CAPACITY	GRADUATIONS	SQUARE DRIVE	HEAD STYLE	HANDLE STYLE
1008	0-200	Inch Lbs.	3/8	Fixed	Ball
1686	0-150	Ft. Lbs.	1/2	Fixed	Regular
	0-20	Metric Kilograms			
1792	0-600	Inch Lbs.	1/2	Adaptable	Regular

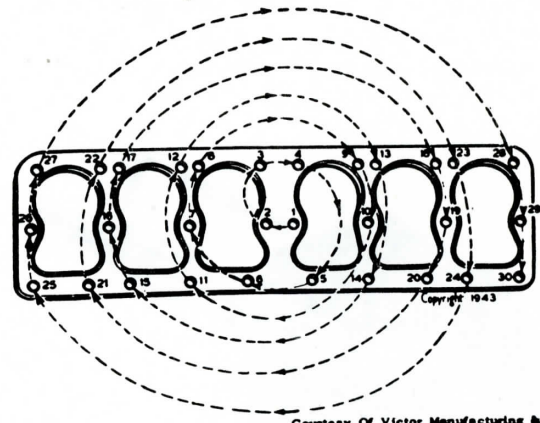


No. 1008

The No. 1008 is designed for use on small bore engines, automatic transmissions and other applications requiring small, accurate torque measurements. Wrench has floating ball handle and is graduated in inch lbs. 2% guaranteed accurate.

## RECOMMENDED SEQUENCE FOR TIGHTENING CYLINDER HEAD BOLTS

1. Use Anti-Seize compound or other high stress lubricant under the bolt head as well as on the threads. (Use torque-figures directly.)
2. Increase torque by 20% if engine oil or grease is used as lubricant. (Don't torque bolts dry.) (Follow manufacturers specific specs if available.)
3. Reduce torque by 20% when new Cadmium plated bolts are used.
4. Tighten all bolts to 1/3 final full Torque.
5. Re-tighten all bolts to 2/3 final Torque.
6. Re-tighten all bolts to full Torque and proper sequence.
7. Re-tighten to full Torque again in reverse sequence. (This insures that no bolts have been missed.)
8. Re-Torque to final specifications in normal sequence again after engine warm up.



Courtesy Of Victor Manufacturing & Gasket Co.

**CAUTION:** Bolts threaded into aluminum may require much less torque.

## GLAZE BREAKER HONE

Sturdily built deglazing hone breaks the glaze in any cylinder. Flexible drive shaft permits easy access to all cylinders. Cone expansion adjusts hone to cylinder wall with uniform pressure. Adjustable spring tension lets you select desired pressure.

Fits standard 1/4 inch drill. Cylinder range is 3 inches to 7 inches, no extensions required.

Supplied with 180 grit stones recommended for quick, positive seating of steel and chrome rings. Replacement stones and pads available.

### Part No.

**1053** Glaze Breaker Hone for 3"—7" Cyl. Dia.

**1374** Set of Stones and pads for 1053

**1864** Small Engine Hone for 1"—3" Cyl. Dia.

**1864A** Set of Stones for 1864

### No. 1053



## CYLINDER WALL DE-GLAZER

Speedy, economical De-Glazer consists of eight abrasive sheets riveted at the center and stiffened by a spring steel backbone. Costs only pennies—pays off in successful ring jobs.

Deglaze a complete block in less than 5 minutes. Fits either 1/2 inch or 1/4 inch drill.

Available in four sizes 2 inch to 7 inch diameter.

### Part No.

**1113** De-Glazer 2" to 3" dia.

**1240** Replacement Element for No. 1113

**1093** De-Glazer 2 3/4" to 3-7/8" dia.

**1241** Replacement Element for No. 1093

**1097** De-Glazer 3 3/4" to 5 3/4" dia.

**1242** Replacement Element for No. 1097

**1243** De-Glazer 5" to 7" dia.

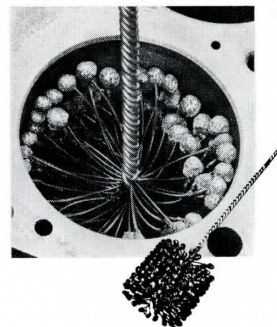
**1245** Replacement Element for No. 1243



### No. 1113

## CYLINDER WALL FLEX-HONE

The easy and economical way to recondition cylinder walls with a perfect cross hatch for oil retention and for quick ring seating. Globules of silicone carbide laminated to the ends of hi-density nylon creates a flexible hone which is unbreakable, requires no set up, and does not get out of shape. Just chuck the wire shaft in a 3/8" or larger drill; lubricate cylinder wall with a little oil and start deglazing. In 30-40 seconds the cylinder is done. Normal life of this tool is at least 1,000 cylinders.



### Part No. For Cylinder In Chassis

**1373** 2" 51 MM

**1700** 2 1/4" 57 MM

**1701** 2 1/2" 64 MM

**1702** 2 3/4" 70 MM

**1703** 3" 76 MM

**1733** 3 1/4" 83 MM

**1704** 3 1/2" 89 MM

**1734** 3 3/4" 95 MM

**1735** 4 1/8" 105-92 MM

**1736** 4 5/8" 118-105 MM

### Part No. For Cylinder Out of Chassis

**1705** 3" 76-70 MM

**1707** 3 1/2" 89-76 MM

**1720** 4" 101-89 MM

**1801** 4 1/2" 114-101 MM

**1737** 5" 127-114 MM

**1798** 6" 152-140 MM

**1799** 7" 178-165 MM

### For Bore Sizes

3" to 2 3/4"

3 1/2" to 3"

4" to 3 1/2"

4 1/2" to 4"

5" to 4 1/2"

6" to 5 1/2"

7" to 6 1/2"

### No. 1108A

### REPLACEMENT HONE STONES—SET OF THREE

## FLEX DRIVE SHAFT

This flex shaft lets you get to those hard to reach cylinders and can be used with any of the brush deglazers. Will operate at a 180° bend. The shaft cover is heavy duty to protect your hands from the shaft. Very handy for in the car applications.



### No. 1747

## CYLINDER DE-GLAZER

Just put a little oil in the cylinder, insert hone and start to work. The tension is preset and the three stones do the job in seconds. Spring action on the stones keep the stones against the cylinder wall at the correct pressure. The flex drive shaft works at difficult angles in or out of the car. Capacity 2"-5 1/2".



### No. 1108



## QUICK-CUT RIDGE REAMER

This extra-sturdy, extra-durable ridge reamer will handle all modern engines with bores from 3 inches to 5 inches, including canted and most short stroke types. Tool sits solidly in the cylinder, with holding blades maintaining good wall contact for smooth cut. Cutter head guide plate locks on both sides. Tungsten carbide Saf-T-Blade will not overcut, chatter or dig in.

Smooth cutting action of this new ridge reamer is attained by fine-thread feed-up. Accuracy maintained by heavy, heat-treated center bolt. Steel collar on center bolt protects threads from wrench damage. Three position setting of spring-loaded cutter head permits change from one cylinder to another without adjusting cutter head assembly.

### AVAILABLE IN THREE SIZES

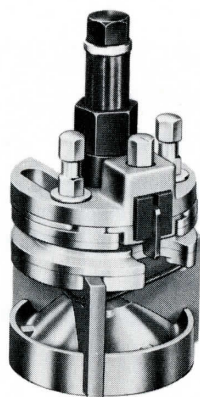
- 1585** Quick Cut Ridge Reamer  
3"-5" dia.
- 1629** Quick Cut Ridge Reamer  
specially designed for extremely short stroke engines.  
Falcon and Comets 6 cylinder.
- 3036** Slick Cut Ridge Reamer  
4"-6" dia.
- 3037** 6"-7" Extension for No. 3036 Reamer.

### Replacement Parts for 1585 and 1629

- 1591** Cutter Blade

### Replacement Cutters for 1050, 3031, 3036 Ridge Reamers

- 3034** Carbon Steel
- 3035** Tungsten Carbide



Nos. 1585-1629-3036

## SAF-T-BLADE RIDGE REAMER

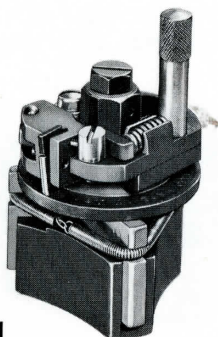
Sturdy, dependable, accurate. Cutting blade follows cylinder wall under spring tension regardless of the shape of the bore. Saf-T-Blade prevents over-cutting metal after the ridge is removed.

Also available in special small size for 2"-3" Bores.

- 1057** Saf-T-Blade Reamer 2.6"-4" dia.
- 1261** Baby Saf-T-Blade Reamer 2"-3" dia.

### Replacement Cutters for 1057 and 1261 Ridge Reamers.

- 1059** Carbon Steel Saf-T-Blade
- 1060** Tungsten Carbide Saf-T-Blade



Nos. 1057-1261

## POWER DRIVE ATTACHMENT FOR 1585

### FOR No. 1585 QUICK-CUT RIDGE REAMER SPEEDS UP CYLINDER RIDGE REMOVAL!

A real companion tool for the 1585 ridge reamer. Simply attach 3/8 inch electric drill and a deep drive socket to the power drive. Power head rotates ridge reamer smoothly—saving time and tedious labor. This well designed tool is rugged, having special heat-treated gears for added strength and longer life.



No. 1605

## PISTON RING EXPANDERS

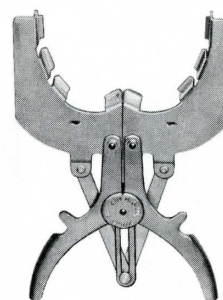
Speeds ring removal and installation—does it easily, without danger of breakage, distortion or other damage to rings, saves time—saves rings.

Made of steel, requires no adjustments.

Available in three sizes: for pistons 2 inches to 7 inches diameter.

### Part No.

- 1258** For Rings 2" to 3" dia.
- 1941** For Rings 2 3/4" to 4 1/4" dia.
- 1936** For Rings 4 1/2" to 7" dia.



Nos. 1258-1936-1941

## RING-O-MATIC RING COMPRESSOR

New quick change design speeds piston ring installation and increases production.

The Ring-O-Matic pliers and bands are designed to operate in all positions not just vertically or horizontally.

Pliers incorporate precision locking action for exact holding and quick release.

**No. 1670 Ring-O-Matic Kit**—Contains Pliers and 6 Bands, size range from 2-7/8 inches thru 4-3/8 inches. Larger Bands available as listed below.

### INDIVIDUAL PARTS LIST

<b>1670A</b>	Ring-O-Matic Pliers	<b>1670G</b>	Band 4-1/8" to 4-5/8"
<b>1670B</b>	Band 2-7/8" to 3-1/8"	<b>1670H</b>	Band 4-1/2" to 4-3/4"
<b>1670C</b>	Band 3-1/8" to 3-3/8"	<b>1670I</b>	Band 4-3/4" to 5"
<b>1670D</b>	Band 3-3/8" to 3-5/8"	<b>1670J</b>	Band 5" to 5-1/4"
<b>1670E</b>	Band 3-5/8" to 3-7/8"	<b>1670L</b>	Band 5-1/2" to 6"
<b>1670F</b>	Band 3-7/8" to 4-1/8"		



No. 1670

## CONEMASTER RING COMPRESSOR

### 2" TO 10" DIAMETERS AVAILABLE

Available in four sizes 2 inches to 10 inches diameter.

Wrap-around type compressors for installing pistons in most makes and models of engines, including new canted block design. Compressor band takes all rings at once, including skirt rings. Self-locking heavy duty ratchet pawl. Automatic friction brake with double tension band.

### Part No.

- 1129** Conemaster Midget for pistons 1 3/4" to 3" diameter
- 1134** Conemaster Compressor for Passenger Cars 2-1/8" to 5" dia.
- 1135** Conemaster Compressor for Truck and Tractor Engines 3 1/2" to 7" diameter
- 3167** Conemaster Compressor for 7" to 10" Pistons



Nos. 1129-1134  
Nos. 1135-3167

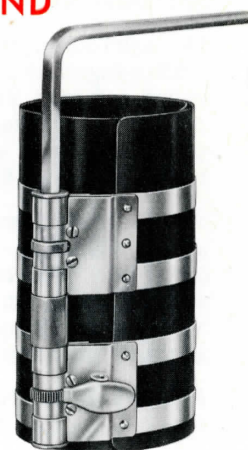
## CONEMASTER WIDE BAND COMPRESSOR

### 3 1/2" TO 7" DIAMETER PISTONS

Compressor band 6 1/2 inches wide, four spring steel tension bands, double, self-locking ratchet. Automatic friction brake. For pistons 3 1/2 inches to 7 inches diameter.

### Part No.

- 1138** For heavy duty skirt pistons 3 1/2"-7" dia.



No. 1138

## SLIPPER SKIRT RING COMPRESSOR

### 2 7/8" TO 4 3/8"

Special design narrow compressor band for slipper skirt pistons. Compresses rings firmly without funneling at pin sides of piston. For pistons 2-7/8 inches to 4-3/8 inches diameter.

### Part No.

- 1132** Slipper Skirt Ring Compressor 2-7/8"-4-3/8" dia.



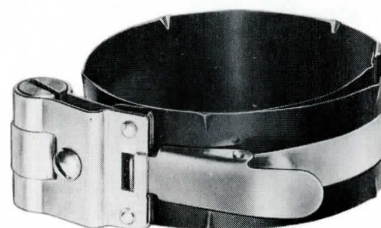
No. 1132

## BREAK-AWAY PISTON RING COMPRESSOR

### 2" TO 4 1/2"

This tool is made for use on engines that have removable cylinders. The band will break apart after the cylinder is installed over the piston rings. Especially designed for engines such as V.W., Porsche, Corvair, motorcycles, aircraft and marine engines. Capacity 2" to 4 1/2". Quality made of the finest band steel. **Skin Packed for Display.**

### No. 1867





## MULTI-BLADE GROOVE CLEANER

Multi-Blade offers a one-piece blade arrangement for 1/16", 5/64", 3/32", 1/8" and 3/16" groove widths. (For 1/4", 5/16", 3/32", 5/32" and 3/8" Grooves, order No. 1706 Cleaner Blade.) Narrow blades remove carbon from the grooves and wide blade trims ring land faces. Depth guard control prevents blades from digging or catching in drilled holes in oil ring grooves.

Available in three sizes: For pistons 2 inches to 6 inches diameter.

### Part No.

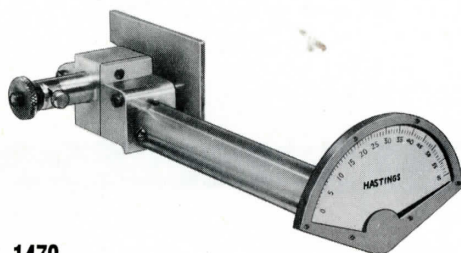
- 1025** Multi-Blade Groove Cleaner 2.6" to 5" dia.
- 1026** Multi-Blade Groove Cleaner 4" to 6" dia.
- 1275** Multi-Blade Groove Cleaner 2" to 3" dia.
- 1009** Replacement Groove Cleaner Blade for 1/16", 5/64", 3/32", 1/8", and 3/16" Grooves
- 1706** Replacement Groove Cleaner Blade for 3/32", 5/32", 1/4", 5/16", and 3/8" Grooves



**Nos. 1025-1026-1275**

## CYLINDER TAPER GAUGES

Accurately check taper and out-of-roundness the full length of the cylinder. Indicating head with graduations in .001 inch for easy reading. Complete with setting anvil and instructions. Cylinder Range 3 inches to 5 inches.

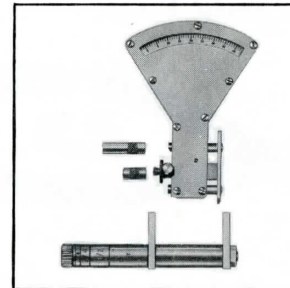


**No. 1470**

## SMALL BORE CYLINDER GAUGE

For 1 3/4" to 3 3/4" Bores

This gauge is approved by Briggs & Stratton. Quickly check the amount of taper in small engines. Comes complete with setting anvil and instructions. Range 1-3/4" to 3-1/4".

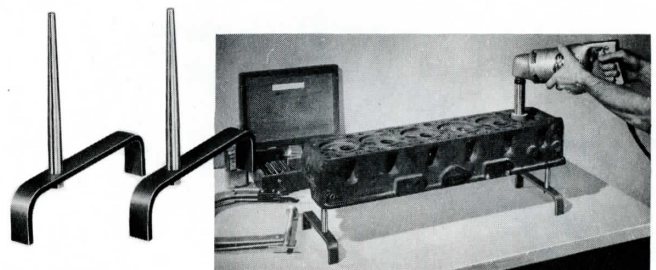


**No. 1424**

## VALVE AND CYLINDER HEAD TOOLS

### CYLINDER HEAD HOLDERS

A real time saver for any shop! This sturdy stand holds cylinder heads safely and securely while you repair cracks, grind seats, clean carbon, knurl and ream guides. There is ample clearance under heads for knurling and reaming valve guides.



**No. 1689  
(pair)**

### VALVE STEM HEIGHT GAUGE

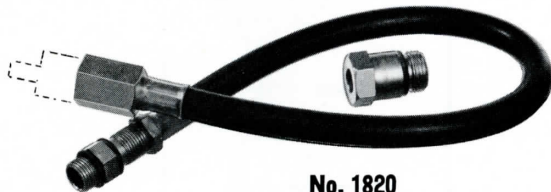
This new adjustable set of gauges does away with the inconvenience of having to buy a different gauge for every application. The three gauges handle virtually all automotive applications. The gauges can be adjusted up or down and the handy go-no go indicator grooves keeps you within limits. Simple and fast to use. Comes complete with instructions.



**No. 1800**

## CYLINDER PRESSURE HOSE

Just put an air hose nipple on this hose and use it to test for leaking intake or exhaust valves. It can also be used to hold up valves to remove valve spring inserts, valve seals or valve springs without removing the cylinder heads. Comes complete with 14 mm and 18 mm spark plug adaptors that will fit the new small General Motors type spark plug.

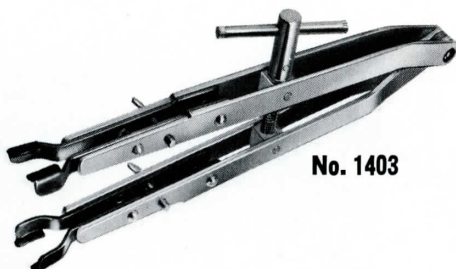


**No. 1820**

## SMALL ENGINE VALVE SPRING COMPRESSOR

The ideal tool for removing and replacing valve springs in small engines. Slender design enables this tool to reach into the small recesses of these engines.

Spring steel jaws have thin edges that easily slide over and under the ends of the valve spring to compress it for removal. Thumb screw adjustment widens or narrows jaws to fit valve springs. Made entirely of steel with cadmium finish.

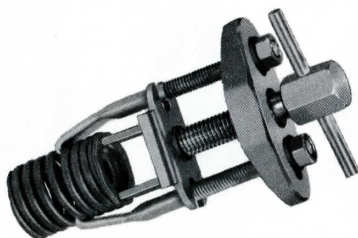


**No. 1403**

## VALVE SPRING COMPRESSOR

A new, easy way to remove valve spring keepers and springs without removing the head. This valve spring puller has four-way adjustment to fit any spring and make compressing and pulling valve springs an easy, one man operation. All wearable parts are case hardened.

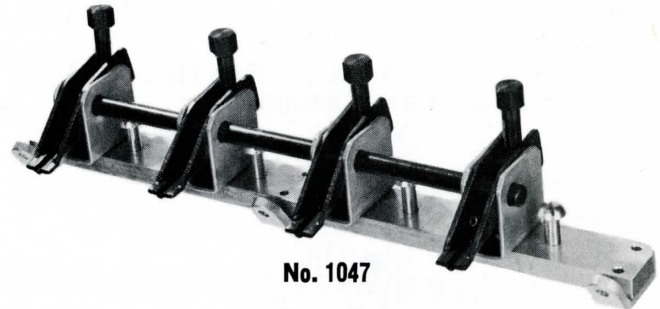
Simply adjust jaws to slip over spring—fit jaws into spring coils—turn compressor screw down until spring is compressed—remove valve keeper and spring—leave spring compressed in tool until ready for re-installation.



**No. 1696**

## CHEVROLET VEGA CAMSHAFT TOOL

This tool is an absolute necessity for servicing valves or replacing the camshaft on the Chevrolet Vega. Because of the overhead cam design the camshaft must be removed before the valves can be serviced. This tool compresses the cam followers so the camshaft can be removed. The tool is bolted to the head and the cam followers are compressed by powerful leverage provided by heavy-duty pressure screws. Cylinder heads can be serviced on or off the car. Rugged steel construction with hardened parts at points of wear and strain. A real time saver and will pay for itself in a short time. Order the No. 1048 valve spring adaptor and the No. 1050 split lock replacer separately.



**No. 1047**

## CHEVROLET VEGA VALVE SPRING ADAPTOR

This adaptor fits virtually all valve spring compressors in use today. Adaptor is placed between the compressor jaws and gives the extra length needed to compress the valve spring. Can also be used on other similar applications. Adaptor has recessed bottom to prevent the keepers from falling down inside the valve spring. Once loose the keepers can be removed with a magnet. Made of steel, plated for rust resistance.



**No. 1048**

## SPLIT LOCK REPLACER

Designed to easily replace split lock valve keepers. Especially useful on the Chevrolet Vega. Tool reaches down through the center of the No. 1048 spring adaptor to install keepers. To use, load keepers in tool, place over valve stem and push on to install. Can also be used on most other engines. Steel construction, plated to prevent rust. Plastic coated grip.



**No. 1050**



## V-8 VALVE LIFTER AND SPRING COMPRESSOR



No. 1396

Designed for cramped areas around hard-to-get-at valves. Screw-type lifter features high lift design for inserting and removing valve keys, and is reversible for re-installing springs. Lower jaw and frame are solid piece case hardened steel. Upper jaw is tempered spring steel.

## UNIVERSAL C-TYPE VALVE LIFTER

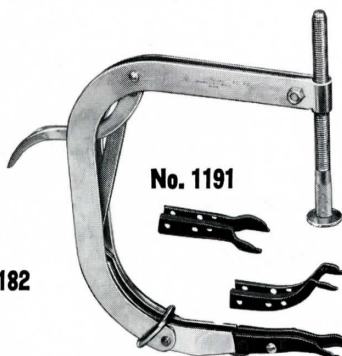
**FOR AUTOMOTIVE HEAVY DUTY AND INDUSTRIAL ENGINES—No. 3182**

Works on all engines where there is sufficient clearance. This rugged tool is powerful enough to raise the stiffest spring with one-hand ease. Spring always moves straight up—top and bottom parallel—no danger of slipping.

Equipped with straight jaws, high off-set jaws, and large jaws.

### Part No.

- 3182 Universal C-type Valve Lifter
- 1133 Small Straight Jaws, pair
- 1171 High Off-set Jaws, pair
- 1191 Large Straight Jaws, pair



No. 3182

No. 1191

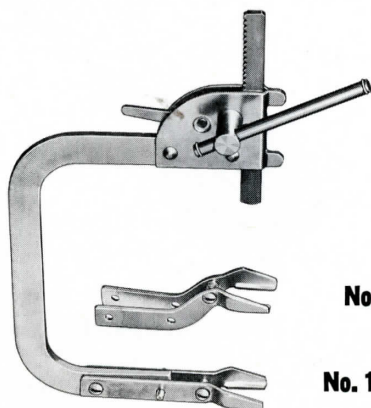
No. 1171

No. 1133

## C-TYPE VALVE LIFTER

**A COMPACT POWERFUL LIFTER, SIMPLE AND EXTREMELY FAST TO OPERATE**

Designed for valve-in-head engines, but also services Ford flat head V-8's. Handles valves up to 6-3/4 inches long. Adjustable stop gives quick, convenient control of ram travel.



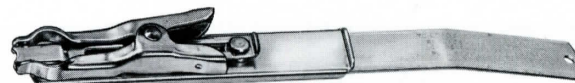
No. 1397

No. 1399

No. 1398

## SPLIT LOCK REPLACER

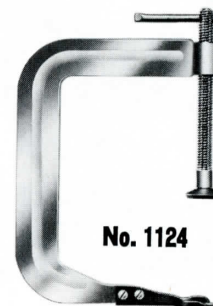
Quickly position lock on stem and hold locks in position until lock retainer is lowered to receive them. Slim sturdy design. Just the right size and shape to work in the tightest blocks. Ruggedly built to withstand years of hard use.



No. 3185

## SMALL ENGINE VALVE SPRING COMPRESSOR

One piece jaw compresses spring for easy replacement of split locks or pins. Works on virtually all small engines, motorcycles, garden tractors, etc. Capacity is 3/4"-1-1/16" springs. Complete with regular and special small jaws.



No. 1124

## VALVE SPRING COMPRESSOR, MEDIUM SIZE

Light weight but extremely powerful compressor. Can be used on "L" head engines without taking off the heads. Clamp tension is controlled with one hand leaving the other hand free to replace the split locks. Capacity is from 7/8" to 1-1/2" springs. Very good for use on compacts, foreign cars, and some small engines.



No. 1125

## HEAVY DUTY AIR OPERATED VALVE SPRING COMPRESSOR

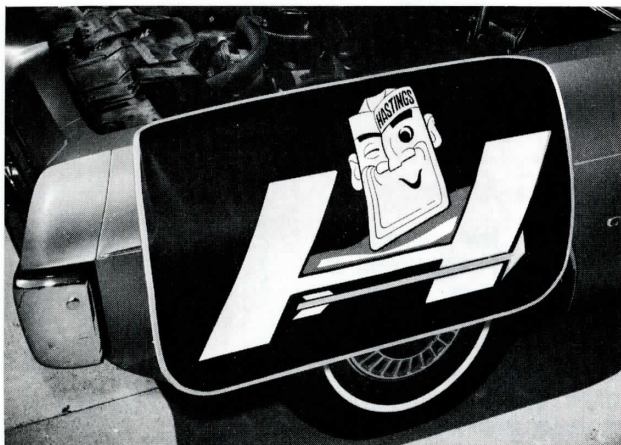
Controlled air pressure takes all the work out of compressing the valve springs. Very good for use on regular automotive springs or up to the heaviest truck and bus springs. Light weight but very strong frame will not bend under the heavy loads it was designed for. Operates on 90 to 150 lbs. air pressure. Capacity 7/8" to 2-1/2" springs. Comes complete with three sets of jaws.



No. 1089

## SEAT AND FENDER PROTECTOR

Heavy duty "grip-tight" cover. Soft cushioning protects finish against dropped tools, gouging belt buckles, etc. Resistant to all liquids found in an automotive shop. Neoprene coated, just wipe it off with any solvent. Size: 27 inches x 40 inches.



**No. 1043**



**No. 3183**

### Part No.

- 3183** Brake Cylinder Hones for 3/4" to 3" Dia. Stone length 1-1/8" long.
- 3184** Replacement Hone Stones for 3183. Stone length 1-1/8" long.
- 1865** Disc Brake Hone for 3/4" to 3" Dia. Stone length 3/4" long.
- 1865A** Replacement Hone Stones for 1865. Stone length 3/4" long.

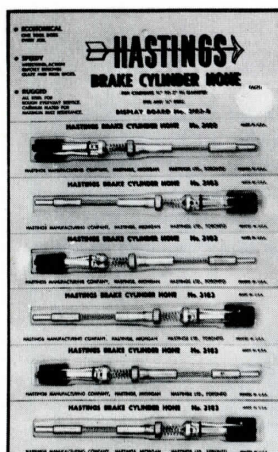
## BRAKE CYLINDER HONE

Full range hone—3/4 inch to 3 inch diameter. No adapters or changes to make. One easy adjustment controls pressure in any size cylinder. Flexible drive shaft makes it easy to hone cylinders right on the car. Hones full length of cylinder—right to the end on step-cut and bind-end cylinders. Just one size and type of stone for all work.

## BRAKE CYLINDER FLEX-HONE

These brush type deglazers are identical to the larger cylinder type except for size. They are very safe to use and will not fly apart if pulled out of a brake cylinder while still turning. They will do 1,000 deglazing jobs under normal conditions. The 1747 flex shaft can also be used with these. In the long run these are the most inexpensive hones to use.

### Display Card Packaging 3183B-3184B



**3183B** Display Card Contains 6 **No. 3183** Hones



**3184B** Display Card Contains 12 **No. 3184** Replacement stones. Will fit most other popular hones.

### Part No.

- 1738** 7/8" 22 MM Diameter
- 1739** 1 1/8" 29 MM Diameter
- 1740** 1 3/8" 35 MM Diameter
- 1372** 1 5/8" 41 MM Diameter
- 1741** 2" 51 MM Diameter



**Nos. 1738-39-40-41**

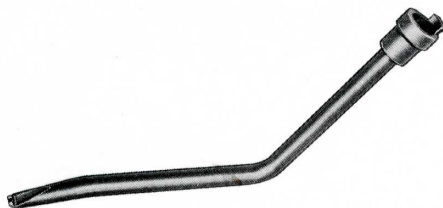


**BRAKE ADJUSTING WRENCH****No. 1107**

This short length tool gets into many tight spots found on today's cars. Curved and ground for universal use. Lustre plated.

**UNIVERSAL BRAKE ADJUSTING WRENCH****No. 1085**

Most useful and popular model. Ground and tapered for easy access to most all applications. Lustre plated.

**BRAKE SHOE SPRING TOOL****No. 1087**

This single tool will remove and replace brake return springs on most cars. Bendix spring remover on one end and installer on the other. A compact rugged tool. Lustre plated for rust protection. Heated-treated for long wear.

**BRAKE SPRING TOOL****No. 1096**

Used for removing the dish type washer on brake shoe hold down springs. Knurled cup securely grips washer. Notched for washers with ears. Plastic handle. Bright lustre plated.

**BRAKE ADJUSTING WRENCH****No. 1092**

Offset end for Corvair, Chevy II, and other compacts. Opposite end is bent to clear obstructions. Lustre plated.

## TUBING BENDER SET

No. 1130



These benders will quickly and easily bend copper and steel tubing. Eliminates cracking and sharp bends. Quality made of spring steel, cadmium plated for rust protection. Set of three benders will handle 1/4" 5/16" 3/8" O.D. tubing. A must for every brake mechanic.

## BRAKE SPRING PLIERS



No. 1103

Removes and installs brake springs on majority of cars and trucks. Forged from alloy steel and heat-treated for long wear. Designed with narrow points for inline pull on the springs. Bright lustre plated for rust protection. Equipped with special bendix socket on one end.

## DOUBLE FLARE TOOL SET



No. 1120

Built to provide the necessary pressure to double flare steel brake tubing. Will double and single flare both copper and steel tubing. Double flare adaptors provided for 3/16" 1/4" 5/16" 3/8" 1/2" tubing. Alloy steel swivel is heat-treated, ground, and chromed to reduce compression friction. Yoke and bar is forged and tempered for added strength. Comes complete in heavy duty carrying case.

- 1120A Double Flare Adaptor 3/16"
- 1120B Double Flare Adaptor 1/4"
- 1120C Double Flare Adaptor 5/16"
- 1120D Double Flare Adaptor 3/8"
- 1120E Double Flare Adaptor 1/2"

## TUBING CUTTER



No. 1118

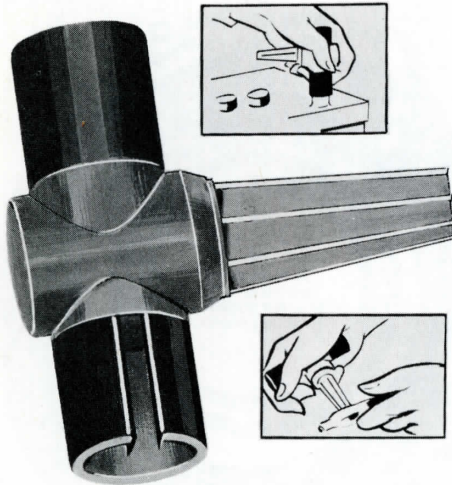
Designed to cut soft copper and steel brake tubing. Will cut close to a flared end for minimum waste. Cutter wheel is made of tool steel for long life. A built in reamer blade folds back out of the way when not in use.

**No. 1118A HARDENED CUTTER WHEEL ONLY.**



## BATTERY POST & CLAMP CLEANER

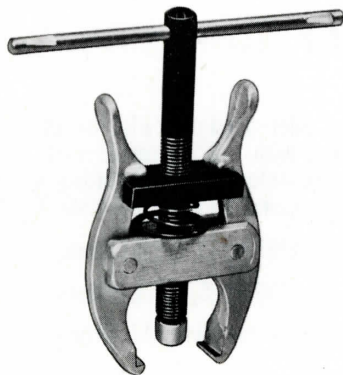
This rugged cleaner will quickly and safely clean even the most corroded terminals. The double ended post cleaner will handle both the positive and negative posts. The tapered reamer cleans both size terminals. Constructed of high quality steel and shock proof plastic.



No. 1677

## BATTERY TERMINAL AND GEAR PULLER

This handy little puller will remove even the toughest terminals without damage to the battery case or post. It will also pull generator bearings and magneto gears. A good puller for the small jobs. Range 5/8 inch to 1-3/8 inch cadmium plated for corrosion resistance.



No. 1852

## BATTERY CARRIER

Designed for both "Post" and "Postless" batteries. Adjustable . . . picks up any size battery, either widthwise or lengthwise. Positive locking action assures safety. Plate pads prevent battery damage.

No. 1687



## BATTERY TERMINAL CLEANER

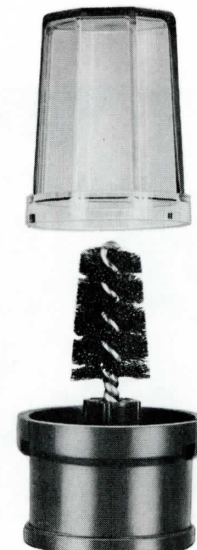
Rugged brush will remove corrosion quickly and safely. Cleans and shapes battery post for perfect electrical contact. Crush-proof metal case.

No. 1007



Basically the same as the 1007 but has a high-impact, corrosion proof plastic case. Has heavy duty wire cleaning bristles for quick cleaning.

No. 1351



## GAS-KEY-PER

Designed to make gas tanks siphon-proof. Consists of rustproof, tension steel spiral. Installs in seconds. 1173 fits American Motors, Jeep, Toyota, Datsun, GMC cars and trucks, Chrysler, Fiat, V.W. car, Volvo. 1174 fits Ford cars and trucks, Mercury, Jaguar, M.G., Renault, Lincoln, V.W. bus, Opel, Saab.



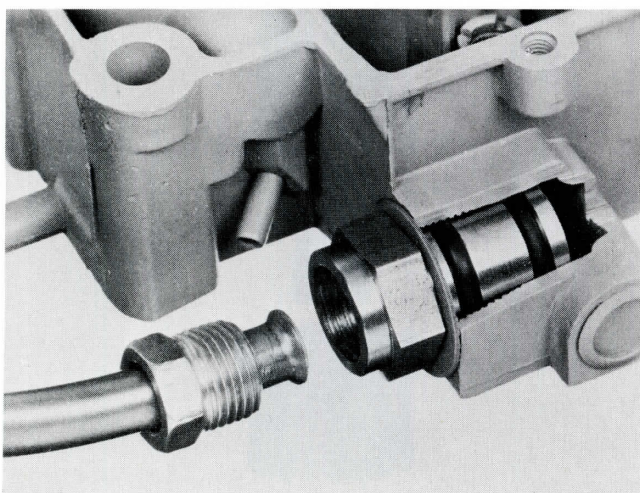
No. 1173  
No. 1174

## NO-TOW-FLAT



No. 1369

This 17' compact air transfer hose is a must for every car owner. Unit comes equipped with screw on valve stem connector and service station air chuck. Simply carry 60 P.S.I. in your spare tire and have instant air available for emergency tire inflation and auto air shocks plus hundreds of uses for home, sports and recreational equipment.



No. 1465 or No. 1466

## CARBURETOR BOWL REPAIR FITTINGS

For Quadrajets fuel inlet opening "with or without threads", and other carburetors with 7/8" diameter inlet. Easy to install without removing carburetor. Just push fitting into opening and tighten. "O" rings expand to form Gasoline Tight Seal.

No. 1465 fits 3/8" gas lines.

No. 1466 fits 5/16" gas lines.

Inner gas filter cannot be used with this fitting.



## RETHREAD DIES-COARSE

7 pc. NC hex die set for coarse threads. 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" and 5/8". Comes in handy storage case.

## RETHREAD DIES-FINE

7 pc. N.F. hex die set in the following sizes: 1/4", 5/16", 3/8", 7/16", 1/2", 9/16" and 5/8" fine thread. Complete with storage case.



**No. 1344**  
**No. 1345**

## RETHREAD DIES-METRIC

Now available in metric sizes, these dies let you fix expensive metric bolts quickly and safely. 5 pc. set comes in storage case. 6 x 1 MM, 7 x 1 MM, 8 x 1.25 MM, 10 x 1.50 MM and 12 x 1.75 MM sizes.



**No. 1346**

## UNIVERSAL THREAD FILE (COARSE THREAD)

**No. 1340**

## UNIVERSAL THREAD FILE (FINE THREAD)

**No. 1341**

Easily and quickly restores damaged threads on bolts, shafts and rods. Comes with 8 of the most common thread sizes. Will fix either right or left hand threads. Saves expensive metric bolts and other threaded parts.

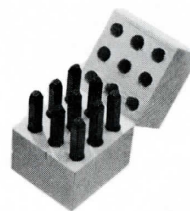
## METRIC THREAD FILE

Comes with 8 of the most popular metric thread sizes.

**No. 1342**

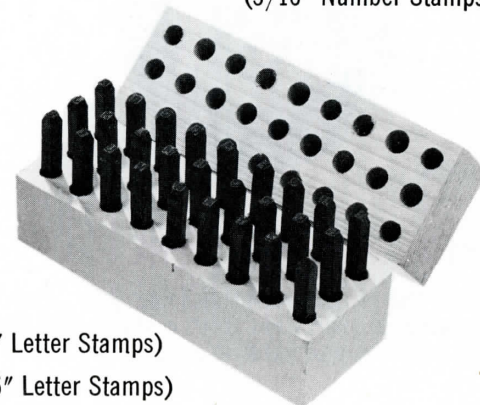


## METAL STAMPS



**No. 1347**  
(1/8" Number Stamps)

**No. 1349**  
(3/16" Number Stamps)



**No. 1348** (1/8" Letter Stamps)

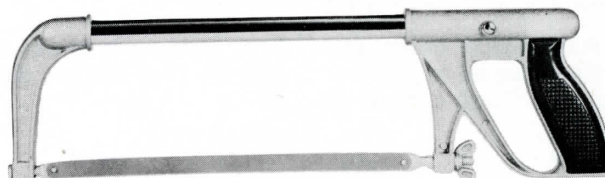
**No. 1350** (3/16" Letter Stamps)

These letters and figures are an excellent grade of hand stamps for general machine and production use. Heads do not mush room or split. This safety feature alone makes these stamps desirable for general shop use. Figure sets consist of 9 pieces. Letter sets consist of 27 pieces, including "&" sign.

## HEAVY-DUTY HACKSAW

This economical, rugged saw has adjustable frame for either 10" or 12" blades. Light weight, compact, die cast aluminum frame. Handle is completely enclosed for safety.

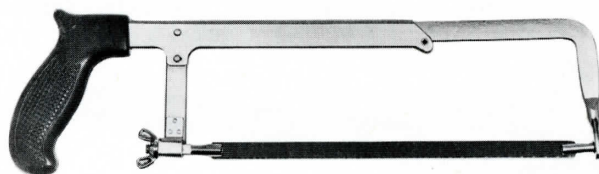
**No. 1005**



## ECONOMY HACKSAW

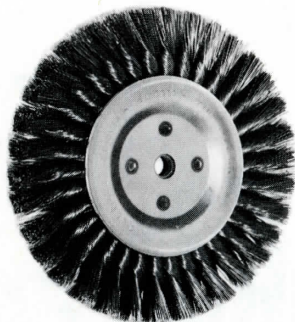
Rubber composition handle. Reinforced back gives extra strength. Frame adjusts for 8" to 12" blades, blade may be faced in four directions. Nickel-plated stock .165" x 5/8", depth 3 1/8". Comes complete with 10" blade.

**No. 1006**



### TUFTED WIRE WHEEL-6" DIA.

Twisted tuft straight wire construction for extra long life. Highest quality oil tempered carbon steel wire. Excellent for those extra tough cleaning or brushing operations. 1/2" and 5/8" arbor adaptor included.



No. 1041

### WIRE WHEEL-6" DIA.

Very good for all-around cleaning jobs. Highest quality oil tempered crimped wire. 3/4" width, heavily filled. 1/2" and 5/8" arbor adaptor included.



No. 1046

### PARTS CLEANING BRUSH

Chemical resistant bristles mounted on a comfortable hardwood handle. Designed to help remove even the most stubborn dirt or grease. Tough crimped nylon bristles. 1" dia.

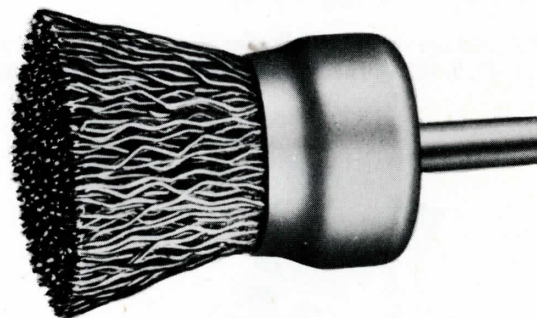
No. 1039



### TIN ACID SOLDER BRUSH

A handy little brush for use with solder acid and other similar chemicals. 3/8" wide brush with a 5" tin handle.

No. 1040



### WIRE END BRUSH

No. 1023

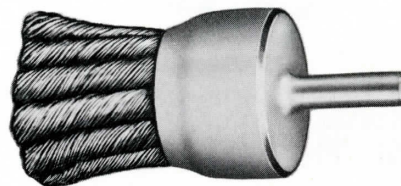
Made to remove carbon from hard-to-get-at places, such as cylinder heads, manifolds, etc. May be used with any 1/4" drill. Straight, crimped wire mounted in a steel housing. 1" dia.

### BRASS END BRUSH

No. 1367

New type brass filled wire brush will outlast a regular brass brush many times over. Steel wire is coated with a special brass that is safe for use on soft metal parts such as aluminum heads but still cleans thoroughly. Heavy-duty steel housing, 1" diameter brush. 1/4" drive shank.

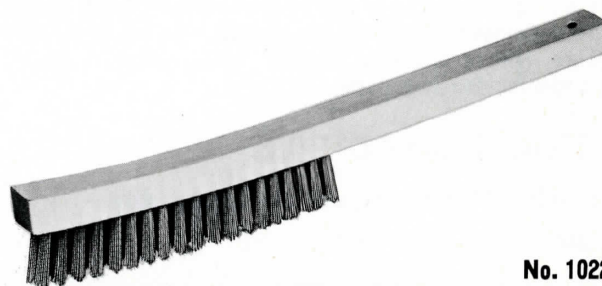
### KNOTTED WIRE END BRUSH



No. 1038

Similar to the regular end brushes but the wires are double twisted for extra stiffness. An extremely tough brush for those hard cleaning jobs.

### WIRE HAND BRUSH



No. 1022

The hand scratch brush with a thousand uses. Removes rust, paint, scale and corrosion, prepares surfaces for refinishing. Solid block, length of brush area 6". Overall length 13 11/16".



## CLEANING BRUSHES

### CLEAN OIL LINES

Finest quality tynex nylon brushes designed for the engine rebuilder. Removes sludge, dirt, metal chips, and grinding compounds from oil passageways. Assures clean oil feed lines and oil galleries for a cleaner, longer lasting engine overhaul.

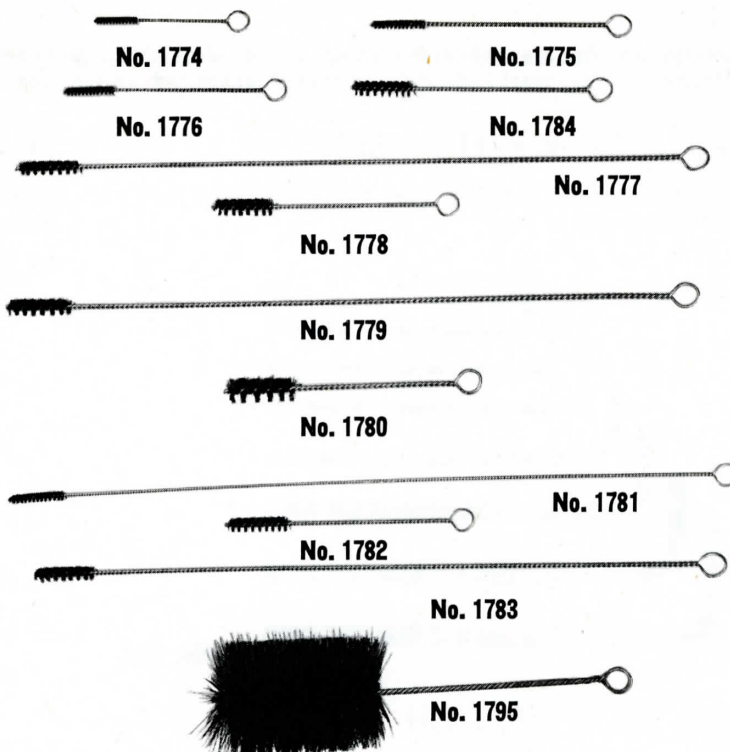
### VALVE GUIDE BRUSHES

These wire brushes will remove the toughest carbon and deposits from valve guides. The handles can be cut off and used in a drill. Three sizes take care of most guides.

**No. 1126** 1/4"-5/16" Guides

**No. 1127** 11/32"-3/8" Guides

**No. 1128** 7/16"-1/2" Guides

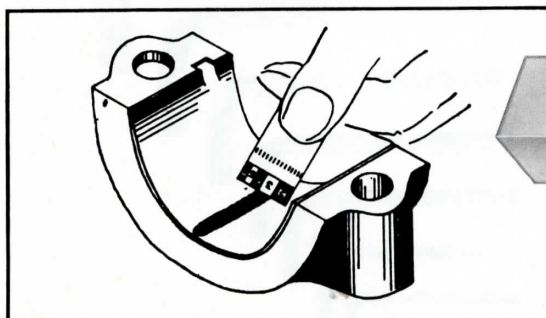


### No. 1853 CLEANING BRUSH KIT.

Contains 1 each of the brushes listed below. Order individual brushes separately.

PART NO.	SIZE	APPLICATION
1774	1/4 x 2 x 10	SMALL FEED LINE HOLES IN BLOCK
1775	5/16 x 2 1/2 x 12	VALVE GUIDES, CAM, CRANKSHAFT, FEED LINES, BLOCK OIL RETURN LINES, FEED LINES FOR OVERHEAD ROCKERS
1776	3/8 x 2 1/2 x 12	VALVE GUIDES, CAM, CRANKSHAFT, FEED LINES, BLOCK OIL RETURN LINES, FEED LINES FOR OVERHEAD ROCKERS
1777	5/8 x 3 x 34	AMERICAN MOTORS, GMC, CHEV. ETC.
1778	3/4 x 3 x 12	LARGER SIZES OF LIFTER HOLES
1779	3/4 x 3 x 34	MAIN OIL GALLERIES ON STRAIGHT EIGHTS
1780	1-1/8 x 3 x 14	FORD V8 LIFTER HOLES
1781	3/8 x 3 x 34	FALCON OIL GALLERIES
1782	1/2 x 2 1/2 x 12	VALVE GUIDE FOR TRUCK ENGINES
1783	1/2 x 2 1/2 x 34	MAIN OIL GALLERIES ON INDUSTRIALS
1784	5/8 x 3 x 12	FEEDLINES FROM OIL GALLERY TO CAM AND MAIN BEARINGS ON FORD V8 OVERHEAD
1795	5 x 7 x 18	CYLINDER BRUSH

## PLASTIGAGE CHECKS BEARING CLEARANCES



Part No.	Size	Envelope Color
<b>HPG-1</b>	.001 to .003—.025 to .076 MM	Green
<b>HPR-1</b>	.004 to .006"—.051 to .152 MM	Red
<b>HPB-1</b>	.004 to .009"—.102 to .229 MM	Blue

Order by part number size and envelope color.

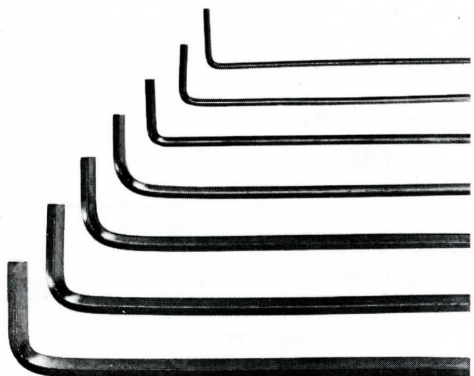
Check bearing clearances the modern, fast, accurate way with Hastings Plastigage. Plastigage is a special extruded plastic thread with accurately controlled "crush" properties. Extremely handy for checking main and connecting rod bearing clearances, oil pump cover-to-gear clearances, and for many other clearance checks.

Each box of Plastigage contains 12 strips in individual calibrated envelopes usually enough to check 12 engines. Available in three clearance ranges.

These hex wrenches are made of fine special analysis steel and are precision tempered for maximum resistance to hand-applied torque and breakage. They meet Federal Quality Specifications and are available in several handy size sets complete with kit bags.

## 7-PC. HEX WRENCH SET

Long length series. Complete sizes from 5/64" thru 1/4". Bright plated, with kit bag.



No. 1014

## 7-PC. HEX WRENCH SET

Complete sizes from 5/64" thru 1/4" standard length. Bright plated, complete with kit bag.

No. 1019



## 10-PC. METRIC HEX WRENCH SET

Contains the following sizes: 1.27 MM, 1.5 MM, 2 MM, 3 MM, 4 MM, 5 MM, 6 MM, 8 MM and 10 MM. Set comes complete with kit bag.

No. 1020



## DELUXE 18-PC. HEX WRENCH SET

9 standard length wrenches from .050 to 1/4" and 9 long length wrenches from 5/64" to 3/8". Complete with kit bag.

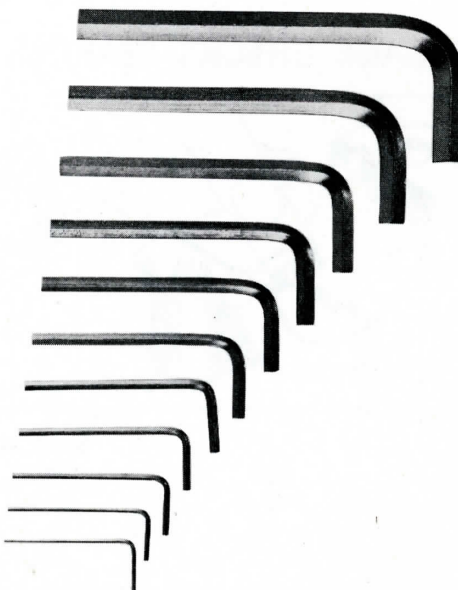
No. 1018



## 11-PC. HEX WRENCH SET

Complete sizes from .050" thru 3/8" standard length. Bright plated, with kit bag.

No. 1013





## SEAL AID TOOL AND SHIMS

### STOP REAR MAIN SEAL LEAK

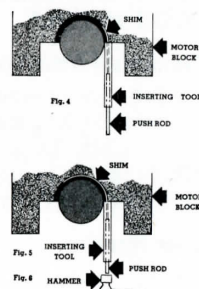
Eliminates major teardown—Simply remove oil pan and bearing cap. Universal application—fits all engines with standard Vee-Groove for wick type seals.

Tool is designed to take one or two shims if needed. Push Rod Tool is made of oil and grease resistant, high impact plastic. Push rod is half hard, plated Steel.

Shims are made .012 tempered and polished Spring Steel.

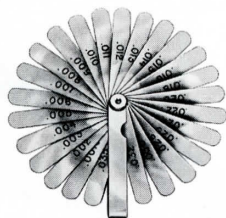
- 1672** Hastings Seal Aid Kit  
**1672A** Seal Aid Shims Box of 12 Pkgs. (144 Shims)  
**1672B** Seal Aid Shims Pkg. of 12 Shims

**No. 1672**

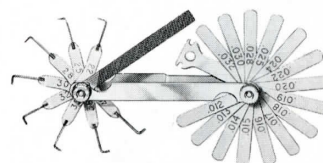


## AUTOMOTIVE FEELER GAUGES

Feeler gauges are precision made from the finest grade Swedish steel. Tested for accuracy, tempered and hardened for long wear. All blades have decimal and the metric equivalent permanently etched on them and will not wear off in use. **All Gauges Skin Packed for Display.**



**No. 1859**

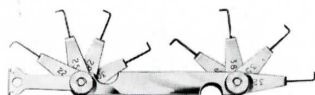


**No. 1862**

## UNIVERSAL MASTER GAUGE

**25 BLADES 3 5/16" x 1/2"**

.0015	.002	.003	.004	.005
.006	.007	.008	.009	.010
.011	.012	.013	.014	.015
.016	.018	.020	.022	.024
.025	.028	.030	.032	.035



**No. 1860**

## SPARK PLUG & IGNITION GAUGE

**8 WIRE GAUGES & ELECTRODE BENDER**

.022 .025 .028 .030 .032 .035 .038 .040

**15 FEELER BLADES & TUNGSTEN FILE**

.012 .013 .014 .015 .016 .017 .018 .019  
.020 .022 .024 .025 .028 .030 .032

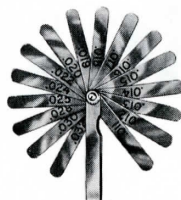


**No. 1863**

## SPARK PLUG WIRE GAUGE

**8 WIRE GAUGES & ELECTRODE BENDER**

.022 .025 .028 .030 .032 .035 .038 .040



**No. 1861**

## EXTRA LENGTH OFFSET GAUGE

**21 BLADES, 4" LONG AND 1" OFFSET**

.006 .007 .008 .009 .010 .011 .012  
.013 .014 .015 .016 .017 .018 .019  
.020 .021 .022 .023 .024 .025 .026

## MASTER IGNITION GAUGE

**CONTAINS 16 BLADES 1 3/4" x 1/4"**

.011 .012 .013 .014 .015 .016 .017 .018  
.019 .020 .022 .024 .025 .028 .030 .032

## CLIP PLIERS

### FOR WINDSHIELD MOULDING AND DOOR HANDLE

#### Windshield Moulding

Release clips to remove chrome moulding on "Glued On" windshields and rear glass. Positively eliminates damage to moulding, clip, or glass. Takes less than a minute to remove full moulding. Allows speedy access to window for leak repairs or replacement of broken glass. Original moulding snaps back on quickly.

#### Door Handles

Permits access to interior of door panels by releasing door handle clips.



No. 1770

## SPARK PLUG GAPPER

This tool makes gapping spark plugs fast and accurate. Just insert spark plug, squeeze, and the job is done. Will work on long or short reach plugs. Gap range from .018-.035 lustre plated.



No. 1114

No. 1851



## SPARK PLUG PLIERS

Used to remove spark plug wires, these pliers are insulated to safely handle voltages of 25,000 or more. Handles are insulated and so are the tips which also have notches to grip the plug wire without slipping. The long handles also keep your hands away from hot manifolds.



No. 1671

## SPRING LOCK HOSE CLAMP PLIERS

New Spring Lock Hose Clamp Pliers are engineered for automatic locking and quick releasing.

Plier heads swivel to any angle. Lets you reach the hardest to get at areas and quickly remove clamps. Works on all sizes.

## OIL SUCTION GUN

An all purpose filling and draining unit. Use anywhere a fluid lubricant is required. Durable steel construction with a 15 inch flexible metal hose. Holds 1½ pints or 20 ozs.

No. 1659A Repl. Flex Hose and base

No. 1659B Repl. Plunger



No. 1659



## OIL FILTER GASKET STRIPPER

### REMOVES BAKED-ON GASKETS FAST!

Eliminates need for removing the filter head from the car, saves 15 minutes even on the toughest jobs. It's a profit-making time saver.

Designed for use on refillable, cartridge-type oil filters. Use backside of Stripper for fast installation of new gaskets.



No. 1750

## TAIL PIPE REMOVER

The cutter on this tool is the "curl cut" type. It quickly splits and cuts the parts apart for fast removal. It will also cut all kinds of sheet metal. Lustre plated. About 10" long.

No. 1086



## TAILPIPE EXPANDER

### DESIGNED FOR USE WITH IMPACT WRENCH

Reshapes & stretches muffler & tailpipes from 1 5/8" to 2 1/2" dia. A practical, rugged tool that makes easy work of a tough job.

No. 1017



## MUFFLER REMOVER

Removes rusted, corroded connections quickly. "Curl cut" gives a clean fast cut. One of the more efficient hand type cutters on the market.

No. 1088



## COMBINATION MUFFLER AND TAIL PIPE REMOVER

This tool combines the best of several tools into one. The special convex shaped blade is inserted between the muffler and tailpipe. A few sharp taps and the rusted parts are loose. It does the job fast, safe and easy. Lustre plated.

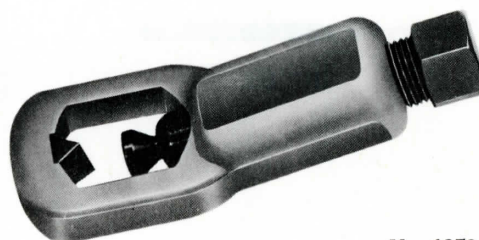
No. 1084



## NUT BUSTER

Remove corroded, frozen or rusted nuts up to 3/4" across flats in seconds with this time saver. A few turns with any 3/4" hand wrench cuts the nuts for easy removal.

Splits frozen, rusted nuts up to 13/16 inch.



No. 1858

## SCREW STARTERS

### FOR PHILLIPS AND STRAIGHT SLOT SCREWS

Spring-loaded carbon steel bit grips inside screw slot to hold screw firmly on screw starter. Releases and recocks automatically. Phillips screw starter handles Reed and Prince type also. Handles have magnets set in other end for use as pickup tools.



No. 1771



No. 1772



No. 1771



No. 1772



No. 1147



No. 1104



No. 1850



No. 1870



No. 1866

## HEADLIGHT SPRING TOOL

This tool is especially designed to reach those hard to get headlight retainer springs. Can be used for many other jobs too. Plastic handle and tough heat-treated steel hook.

## HOOK AND COTTER KEY PULLER

This handy tool will do many odd jobs. Basically a cotter key remover but will do many small pulling jobs, everything from seat cover hooks to carburetor clips. Every tool box should have one.

## CARBON AND GASKET SCRAPER

This 1 inch wide scraper makes short work of those tough cleaning jobs. Blade is forged steel and heat-treated for durability. Can be resharpened many times. Handle is plastic and is comfortable on the hands.

## FLEXIBLE CARBON SCRAPER

For hard to get at places, this 9" flexible carbon scraper will do the job quickly and easily. Ten tempered spring steel blades flex to conform to the surface being scraped. A sliding band will lock the blades into a rigid position. Handle is shaped to be comfortable on the hand. A rugged tool every mechanic should have.

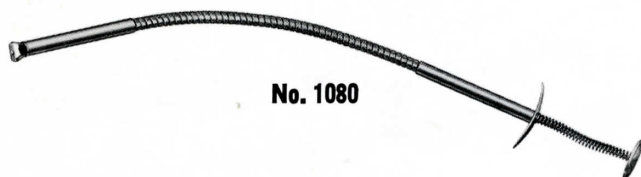
## IGNITION POINT FILE

These files are made from the best carbon tool steel. Finished to precision standards they will easily cut any platinum or tungsten contact point. Leaves a smooth pit free surface. Use on ignition points, spark plugs, relays, circuit breakers and magnetos.



## FLEXIBLE PICK UP TOOL

This pick up tool will bend in any direction to hold or pick up objects. Handy squeeze action gives close control. Lustre finish.



No. 1080

## POCKET MAGNET

All metal body with a knurled handle. Overall length is 6". Comes complete with a pocket clip.



No. 1106

## FLEX POCKET MAGNET

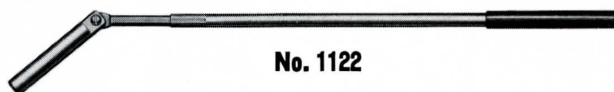
Similar to the large extension magnet but small enough to put in your pocket. Magnetic head swivels in any direction comes with a pocket clip and plastic handle.



No. 1083

## LONG TELESCOPING MAGNET

This heavy duty magnet will lift many times its own weight. The handle will extend from the base length of 16" to 26" overall. The flex head gets into tight places. Bright plated with a comfortable plastic handle.



No. 1122

## RIGID PICK UP TOOL

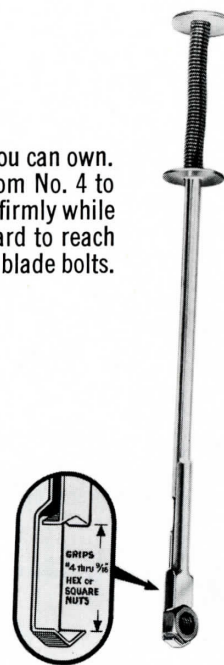
This handy tool is equipped with "fingers" that will let you pick up dropped bolts, nuts, clips, and a thousand other things. Can also be used to hold objects too small for your own fingers. Great for under the dash work.



No. 1121

## NUT HOLDER

This is one of the handiest tools you can own. It will hold hex & square nuts from No. 4 to 9/16". Spring tension holds nuts firmly while starting. Slim design gets into hard to reach places. Real handy for use on fan blade bolts. Overall length is 10".

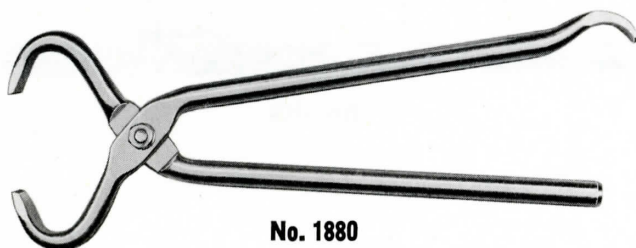


No. 1116



## GREASE CAP PULLER

The thin jaws of this tool slip behind the grease cap. The powerful wedging action forces the cap away from the hub. End of one handle is flat for easy removal of the wheel cover. The bright lustre plate protects against rust.



No. 1880

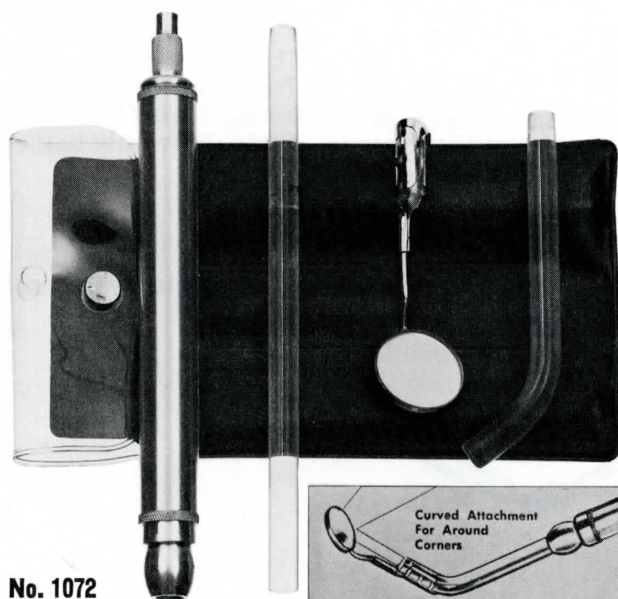
## WHEEL WEIGHT PLIERS

This tool is designed to remove and replace wheel weights quickly and easily. End of one handle is designed to remove the wheel cover. Finish is a bright lustre plate to protect against rust.



No. 1115

## CONDUCT-A-LITE



No. 1072

This is one of the handiest tools you can own. This miniature flashlight will put light where you need it most. It even bends light around corners! Comes complete with two light tubes, one straight and one curved. A handy mirror can be connected to a light tube for even greater versatility. Can be used to inspect points, plugs, starter and generator brushes, under dashboards, even down into engine cylinders. Powered by two penlight batteries. (not incl.)

## DISTRIBUTOR & CARBURETOR ADJUSTING TOOL

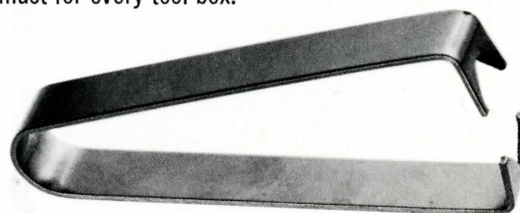
This handy tool has a 1/8" allen wrench for adjusting G.M. distributors and a snap on screwdriver blade for adjusting carburetors. A handy 2 in 1 tool every mechanic should have. Flex steel shaft bends in any direction.



No. 1091

## WIRE STRIPPER

With a squeeze and twist, a quick pull strips most any size wire. Made of spring steel with hardened ground stripping jaws. A must for every tool box.

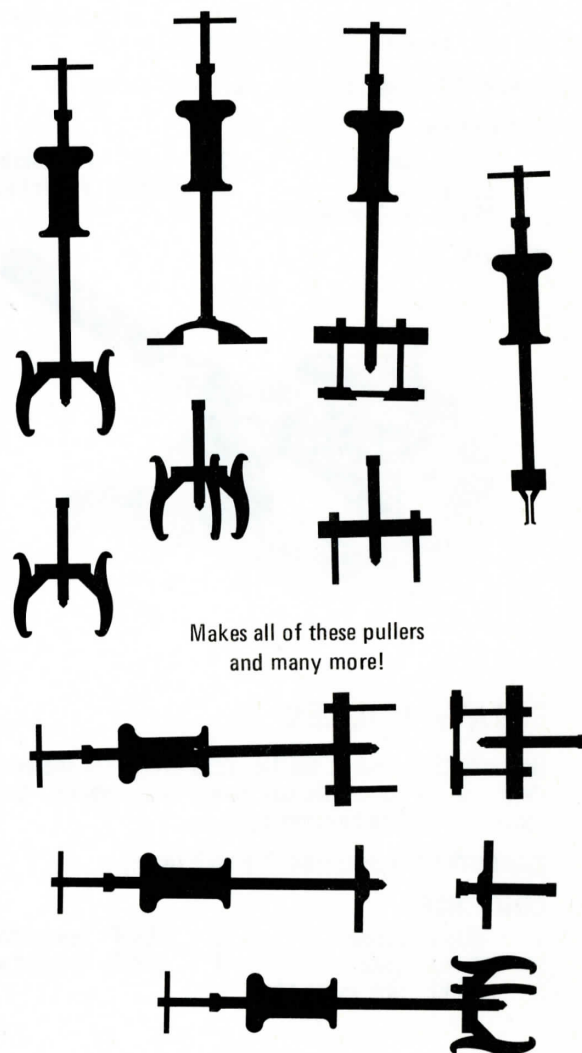
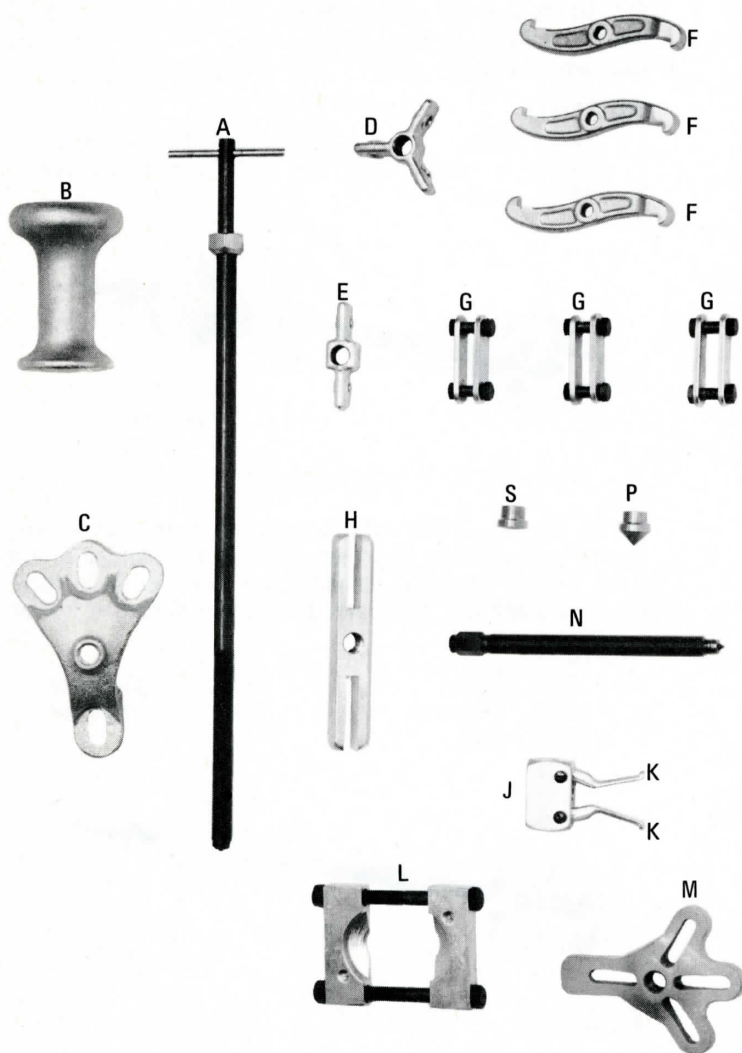


No. 1146



## MASTER PULLER SET—NO. 1833

Now you can own one of the most complete interchangeable puller sets on the market. Over 20 different pullers can be made with this Master Puller Set. The pressure screw and slide hammer shaft are the same thread size so they can be used with all the yokes and crossbars. The puller jaws are reversible and have almost unlimited versatility. Both two and three jaw yokes are supplied and can be used with a pressure screw or slide hammer. All parts are made from select alloy steel and heat treated for durability and strength. This set will pull everything from steering wheels to axles without expensive duplication of parts.



### CONTENTS of 1833

Contains all of the parts below.

Key	Quantity	Part No.	Description	Key	Quantity	Part No.	Description
A	1	1833A	slide hammer shaft	J	1	1833J	yoke and bolts
B	1	1833B	hammer 5¼ lb.	K	2	1833K	jaw
C	1	1833C	axle yoke	L	1	1833L	bearing splitter
D	1	1833D	3 jaw yoke	M	1	1833M	yoke
E	1	1833E	2 jaw yoke	N	1	1833N	pressure screw
F	3	1833F	reversible jaw	P	1	1833P	V point adaptor
G	3	1833G	link assembly	S	1	1833S	flat adaptor
H	1	1833H	cross bar				

These pullers are made from parts of the No. 1833 Master Puller Set. All the parts are interchangeable. Different pullers can be made by the addition of a few pieces. These pullers are forged and machined from select alloy steel. They are precision tempered for maximum strength and durability. Body and jaws are lustre plated. Pressure screw and slide hammer shaft are treated to prevent rust. All parts are available in open stock and can be purchased at any time to add to your set. You can build up a complete puller set as you need it at a very modest cost.

## 2 JAW PULLER

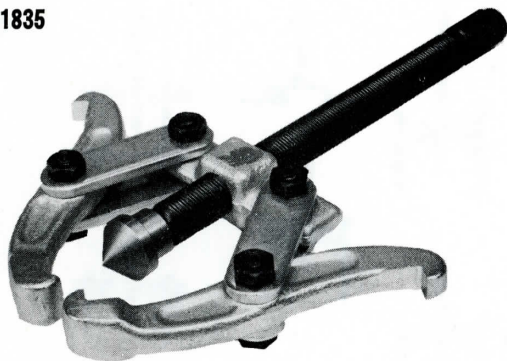
This 2 jaw puller is very versatile. It will pull gears, sprockets, hubs and bearings. Jaws are reversible for even greater versatility. Can be adapted to 3 jaws, both with a pressure screw and slide hammer. Good for small engine use.

**CAPACITY** Spread 6 inches, Reach 3½ inches

### CONTENTS

1	1833N	screw	2	1833F	reversible jaws
1	1833E	yoke	1	1833P	V point adaptor
2	1833G	link assembly			

**No. 1835**



## 3 JAW PULLER

Basically the same as the No. 1835 except for the addition of a third jaw for extra gripping power and stability. Can also be converted to slide hammer use.

**CAPACITY** 6 inch spread, 3½ inch reach.

### CONTENTS

1	1833N	screw	3	1833F	reversible jaws
1	1833D	yoke	1	1833P	V point adaptor
3	1833G	link assembly			

**No. 1836**

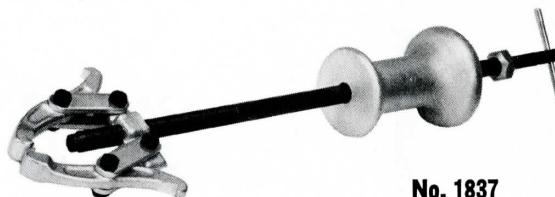


## 2 JAW SLIDE HAMMER PULLER

This is the basic 2 jaw puller with the slide hammer feature. The 5¼ lb. hammer gives tremendous shock power to help pull the really tough ones. The No. 1833N pressure screw can also be used with this puller.

### CONTENTS

1	1833A	shaft	2	1833G	link assembly
1	1833B	hammer	2	1833F	reversible jaws
1	1833E	yoke			



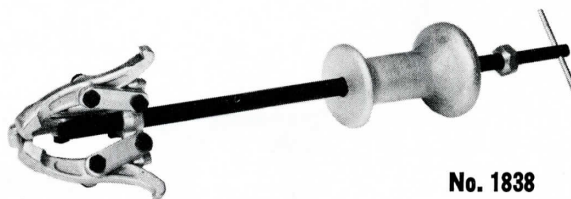
**No. 1837**

## 3 JAW SLIDE HAMMER PULLER

This is the basic 3 jaw puller with the slide hammer feature. Can be converted to many other pullers by the addition of just a few pieces. The heavy hammer gives extra power for those tough jobs and the three jaws give additional holding power.

### CONTENTS

1	1833A	shaft	3	1833G	link assembly
1	1833B	hammer	3	1833F	reversible jaws
1	1833D	yoke			



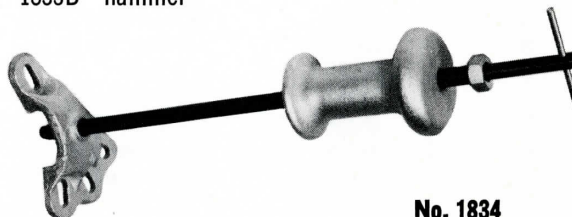
**No. 1838**

## FLANGE TYPE AXLE PULLER

This puller removes flange type axles on cars and trucks. Works on a bolt circle of 4½ inches to 5½ inches which takes in the majority of applications in use. Slots in the yoke will take 4, 5, or 6 stud arrangements. The heavy duty, 5¼ lb. hammer takes off the most stubborn axles. The slide hammer assembly can be used with many other pullers in the line.

### CONTENTS

1	1833A	shaft	1	1833C	axle yoke
1	1833B	hammer			



**No. 1834**



## PILOT BEARING PULLER

This puller will pull the small bushings or bearings found in flywheels. Because there is nothing to push against, a slide hammer type puller is needed. Capacity is from 1/2 inch to 1 1/2 inch ID. This can also be used on generators and starter bushings.

### CONTENTS

1	1833A	shaft	1	1833J	yoke
1	1833B	hammer	2	1833K	jaws



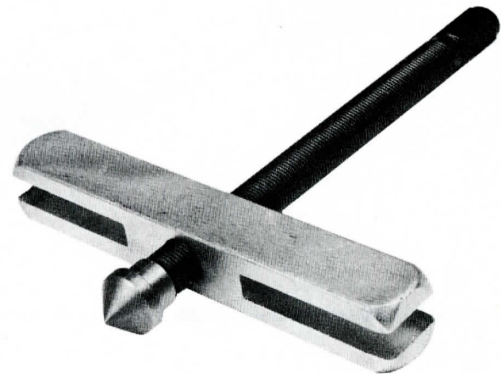
No. 1839

## CROSS ARM PULLER

This slotted cross arm can be used in many different ways. The most common use is with the No. 1833L bearing separator. It can also be used with a slide hammer. The slots will take 3/8 inch bolts for use in tapped hole pulling. Length is 6 1/2 inches.

### CONTENTS

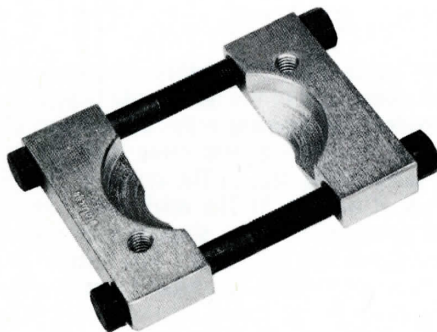
1	1833N	screw
1	1833H	cross arm
1	1833P	V point adaptor



No. 1842

## BEARING SEPARATOR

For removing gears, bearing cones, and other parts that ordinary puller jaws can't grip. Knife edges are flush on one side and tapered on the other to get a good bite. Works good with the No. 1842 cross bar puller. A slide hammer can also be used with this combination.



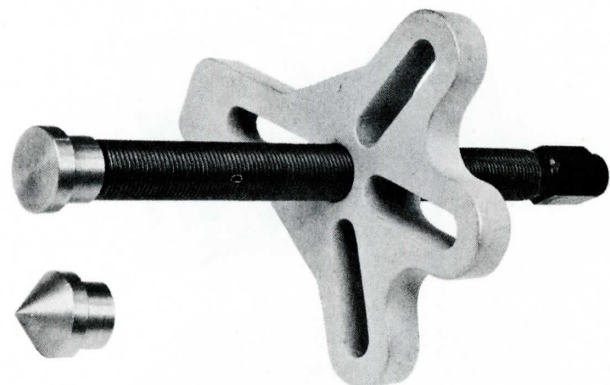
No. 1833L

## STEERING WHEEL & HARMONIC BALANCER PULLER

Used for removing harmonic balancers and steering wheels, the slotted yoke is designed to be used as a two or three hole puller. Bolts are used for tapped holes. The pressure screw can be used with either a flat or pointed tip. Both tips are provided. This puller is very versatile and can be used for many pulling jobs. It can also be adapted to slide hammer use.

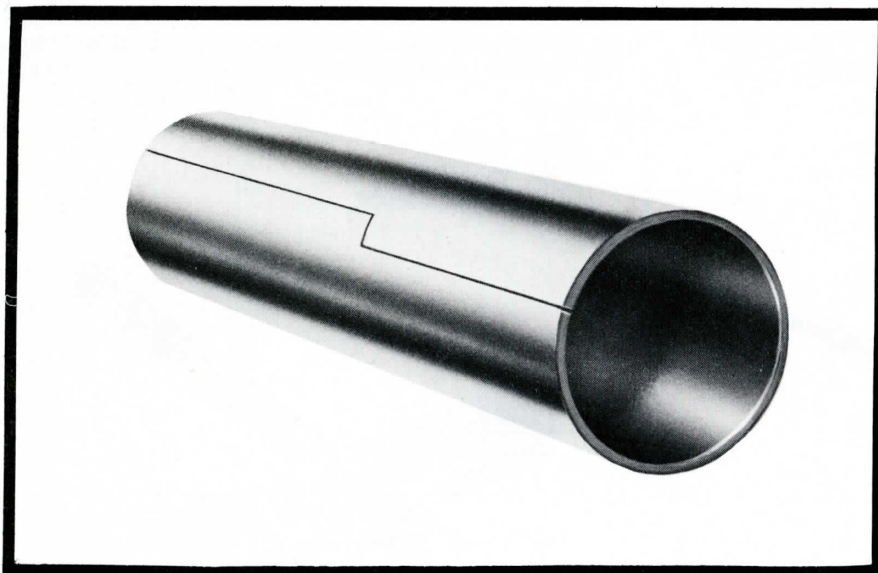
### CONTENTS

1	1833N	screw
1	1833M	yoke
1	1833S	flat adaptor
1	1833P	V adaptor



No. 1840

## HASTINGS BRONZE VALVE GUIDE-LINER

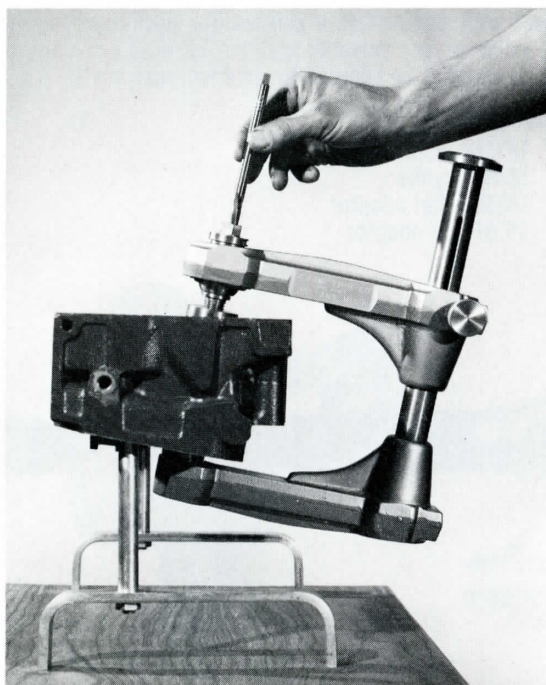


- Rebuilds valve guides with up to .060 wear.
- Provides a continuous one-piece bearing surface of high quality phosphor bronze.
- Outwears cast iron up to 4 times.
- Simple, fast installation.
- 4 sizes fit most engines.
- Can be easily removed and new ones installed.
- A real plus for high performance engines.

Patent Pend.

### PROVIDES THE UTMOST IN PERFORMANCE AND CUSTOMER SATISFACTION.

The excellent wear resistance and rapid heat dissipation of this phosphor bronze liner solves many problems in this critical area. Outwears cast iron up to 4 times as long. Even when used on engines using non-leaded or propane fuels, it gives exceptional increased valve guide life. It can also be fitted to much closer tolerances which are needed to control exhaust emissions. The liners are solid bronze with an offset locking split to keep them in place. They can be removed and replaced if needed. The Heavy Duty liner will repair guides with up to .060 guide wear. Liners are 3" long and can be cut to any length with the cutter provided in each tooling kit. Four guide sizes fit virtually any engine. Individual engine and bulk quantities are available. See separate listing for tooling kits and liners.



### 1875 GUIDE BORING FIXTURE

This new valve guide alignment fixture accurately aligns guide boring tools for installation of the heavy duty bronze guide liners. The fixture provides rigid clamping action on the valve seat and the valve spring seat. The fixture uses three main points to locate from: 1) The valve spring pad. 2) The center of the guide where the least amount of wear is. 3) The valve seat. The combination of these three points assures the stem to seat concentricity on straight or compound angled guides. The fixture is extremely rugged and completely portable. Designed for easy use, it requires no complicated or excessive instruction to do the job. The tool comes complete with 8 valve seat adaptors, 3 spring seat adaptors, clamp wrench and drive extension. The heavy duty bronze guide liners are installed with this versatile tool. The proper valve stem size tooling is supplied separately as listed below and is ordered in conjunction with the boring fixture.



## INDIVIDUAL INSTALLATION KITS FOR .060 LINER

These tooling kits are designed for the installation of Heavy Duty .060 guide liners. Each kit is complete with instructions to install the liners of a single size, in conjunction with the boring fixture No. 1875.



### INSTALLATION KIT

#### For 5/16" Valves

#### 1876 Kit contains:

1876A Boring Drill  
1876B Drill Bushing  
1876C Boring Reamer  
1876D Alignment Pin  
1876E Sleeve Driver  
1876F Sleeve Holder  
1510 Reamer  
1822D Spiraling Tool  
1822E Trimming Tool  
1609 Brush  
1881 Metal Box

### INSTALLATION KIT

#### For 11/32" Valves

#### 1877 Kit contains:

1877A Boring Drill  
1877B Drill Bushing  
1877C Boring Reamer  
1877D Alignment Pin  
1877E Sleeve Driver  
1877F Sleeve Holder  
1511 Reamer  
1823D Spiraling Tool  
1823E Trimming Tool  
1609 Brush  
1881 Metal Box

### INSTALLATION KIT

#### For 3/8" Valves

#### 1878 Kit contains:

1878A Boring Drill  
1878B Drill Bushing  
1878C Boring Reamer  
1878D Alignment Pin  
1878E Sleeve Driver  
1878F Sleeve Holder  
1505 Reamer  
1824D Spiraling Tool  
1824E Trimming Tool  
1609 Brush  
1881 Metal Box

### INSTALLATION KIT

#### For 7/16" Valves

#### 1879 Kit contains:

1879A Boring Drill  
1879B Drill Bushing  
1879C Boring Reamer  
1879D Alignment Pin  
1879E Sleeve Driver  
1879F Sleeve Holder  
1517 Reamer  
1825D Spiraling Tool  
1825E Trimming Tool  
1609 Brush  
1881 Metal Box

## BRONZE VALVE GUIDE LINER .060

### Part No.

1882  
1883  
1884  
1885  
1882A  
1883A  
1884A  
1885A

### Description

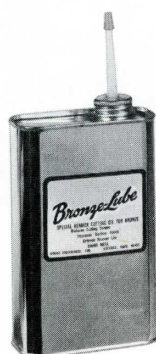
Bronze Guide Liner for 5/16 Valves  
Bronze Guide Liner for 11/32 Valves  
Bronze Guide Liner for 3/8 Valves  
Bronze Guide Liner for 7/16 Valves  
Bronze Guide Liner for 5/16 Valves  
Bronze Guide Liner for 11/32 Valves  
Bronze Guide Liner for 3/8 Valves  
Bronze Guide Liner for 7/16 Valves

### Packaging

Set of 16  
Set of 16  
Set of 16  
Set of 16  
Ctn. of 100 Bulk Pack  
Ctn. of 100 Bulk Pack  
Ctn. of 100 Bulk Pack  
Ctn. of 50 Bulk Pack

## SPECIAL LUBE OILS

### Extend Arbor and Reamer Life

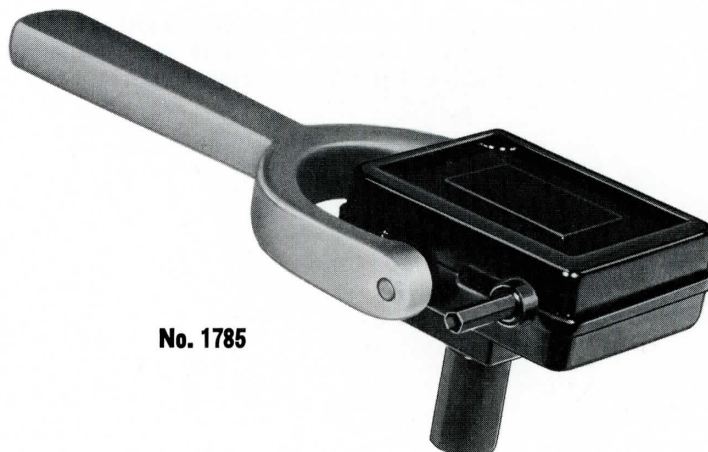


### BRONZE-LUBE

1826 Pint  
1826A Quart  
1826B Gallon

## HEAVY DUTY SPEED REDUCER

Heavy duty speed reducer for valve guide knurling or for installing Bronze Guide Liners. Worm gear drive with powerful 12½ to 1 reduction. Bearings are prelubricated for long life. Hardened input and output drives.

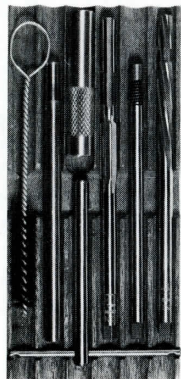


No. 1785

Lubrication is of utmost importance. Many oils have been tried and some work quite well but best results and arbor life will be obtained if the Bronze-Lube is used.

## REPLACEMENT PARTS LIST FOR .030 INSTALLATION KITS

The .030 Valve Guide Liner Kits have been discontinued. We recommend the use of the .060 Heavy Duty Guide Liner when purchasing new valve guide repair equipment. Parts for the .030 Kits and .030 Bronze Liners are available as listed below.



### For 5/16" Valves

1822A Boring Tool  
1822B Sleeve Driver  
1822C Sleeve Holder  
1822D Spiraling Tool  
1510 Reamer  
1822E Trimming Tool  
1831 Steel Case  
1609 Brush

### For 11/32" Valves

1823A Boring Tool  
1823B Sleeve Driver  
1823C Sleeve Holder  
1823D Spiraling Tool  
1511 Reamer  
1823E Trimming Tool  
1831 Steel Case  
1609 Brush

### For 3/8" Valves

1824A Boring Tool  
1824B Sleeve Driver  
1824C Sleeve Holder  
1824D Spiraling Tool  
1505 Reamer  
1824E Trimming Tool  
1831 Steel Case  
1609 Brush

### For 7/16" Valves

1825A Boring Tool  
1825B Sleeve Driver  
1825C Sleeve Holder  
1825D Spiraling Tool  
1517 Reamer  
1825E Trimming Tool  
1831 Steel Case  
1609 Brush

## BRONZE VALVE GUIDE LINER .030

### Part No.

1827  
1828  
1829  
1830  
1827A  
1828A  
1829A  
1830A

### Description

Bronze Guide-Liner for 5/16 Valves  
Bronze Guide-Liner for 11/32 Valves  
Bronze Guide-Liner for 3/8 Valves  
Bronze Guide-Liner for 7/16 Valves  
Bronze Guide-Liner for 5/16 Valves  
Bronze Guide-Liner for 11/32 Valves  
Bronze Guide-Liner for 3/8 Valves  
Bronze Guide-Liner for 7/16 Valves

### Packaging

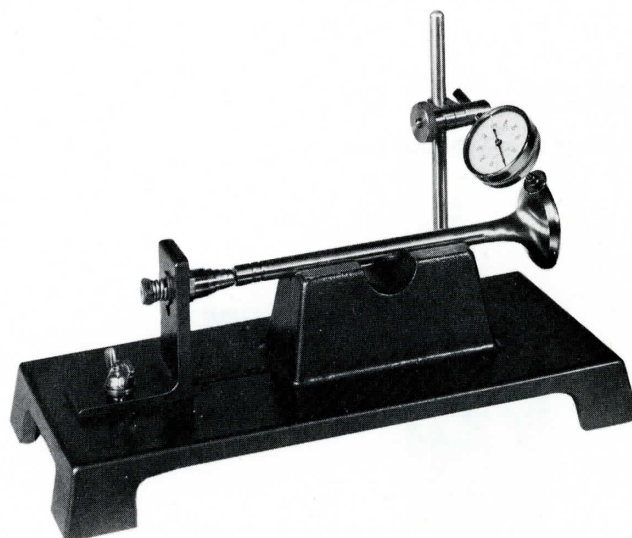
Set of 16  
Set of 16  
Set of 16  
Set of 16  
Ctn. of 100 Bulk Pack  
Ctn. of 100 Bulk Pack  
Ctn. of 100 Bulk Pack  
Ctn. of 100 Bulk Pack

## VALVE INSPECTION CENTER

Precision indicator measures in tenths amount of valve face or valve stem runout.

- All valves used in high performance and heavy-duty engines require checking.
- New valves can be inspected before installation.
- Determines accuracy of valve face grinding equipment.
- Provides a fast means of holding O.E.M. valve tolerances.

A fast, inexpensive way to check for valve face runout and bent valves. Versatile unit is simple and easy to use. Will hold almost every size valve. A real must for every shop.



No. 1051



## VALVE GUIDE KNURLER

How you can resize the inside diameter of worn valve guides quickly, accurately and without removing the guide from the cylinder head or block. Hastings Valve Guide Knurler provides a tremendous savings in labor . . .

- Eliminates costly valve guide removal and replacement.
- Stops oil consumption due to valve guide wear.
- Reduces valve sticking and scoring.
- Eliminates carrying large replacement valve guide inventory.
- Reconditions integrally cast valve guides.
- Operates with 1/4 inch drill run through a speed reducer.
- Sturdy compartment storage box included.

Reconditions all makes and sizes of valve guides with up to .010 wear, except chilled or hardened guides (such as International 450 engines).

### BEFORE



### AFTER

No. 1525

### 1525 KIT INCLUDES

- 1—1523—Speed Reducer
- 1—1524—1/2 Pint Knurling Lubricant\*
- 1—1609—Valve Guide Cleaning Brush

### VALVE GUIDE RESIZING ARBORS

- 1—1526 (.312) For 5/16 Guides
- 1—1527 (.341) For 11/32 Guides
- 1—1528 (.373) For 3/8 Guides
- 1—1539 (.437) For 7/16 Guides

### PRECISION PILOTED REAMERS

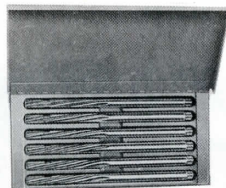
- 1510 — .312
- 1511 — .343
- 1538 — .345
- 1505 — .373
- 1512 — .375
- 1517 — .437

\*Replacement knurling lubricant available in qt. and gal. quantities.

**1524B**—1 Qt. Valve Guide Knurling Lubricant

**1524C**—1 Gal. Valve Guide Knurling Lubricant

## PRECISION PILOTED REAMER KITS



**Precision ground, hardened steel Reamers for accurate Valve Guide Resizing.**

Supplemental Reamer Kits packed in steel compartmented box to be used with No. 1525 Valve Guide Knurler.

**No. 1788** 5/16" Reamer set includes 3 Reamers: .310", .311" and .312"

**No. 1789** 11/32" Reamer set includes 5 Reamers: .341", .342", .343", .344" and .345"

**No. 1790** 3/8" Reamer set includes 5 Reamers: .371", .372", .373", .374" and .375"

## VALVE GUIDE RESIZING ARBORS AND PRECISION PILOTED REAMERS

These tools are designed to do the best job possible. They are made from the finest tool steel and tempered for long life. Both the arbors and reamers have pilots for a self-centering action. The spiral flutes on the reamers give a smooth, even cutting action. As with any precision tool, they should be kept clean and free from chips after using. A good grade of cutting oil should be used also.

All sizes listed are in stock for immediate delivery. Special sizes are available, list size required. Charge for specials will be determined from the cost of the next standard size. An additional \$5.00 grinding charge will be added to that size. Allow 4 weeks for delivery, orders for specials should be directed to "Ring Engineering Department".

### VALVE GUIDE RESIZING ARBORS

PART NO.	DECIMAL SIZE	MM EQUIVALENT
1691	.236	6MM
1602	.250	
1691A	.276	7MM
1526	.312	
1822D	.312*	Special
1691B	.315	8MM
1526A	.317 (5/16 + .005)	
1526B	.327 (5/16 + .015)	
1527	.343	
1823D	.343*	Special
1527A	.348 (11/32 + .005)	
1691C & 1527B	.358 (11/32 + .015)	9MM
1528	.375	
1824D	.375*	Special
1528A	.380 (3/8 + .005)	
1528B	.390 (3/8 + .015)	
1691D	.394	10MM
1678	.406	
1530	.437	
1825D	.437*	Special
1530A	.442 (7/16 + .005)	
1531	.500	
1679	.562	

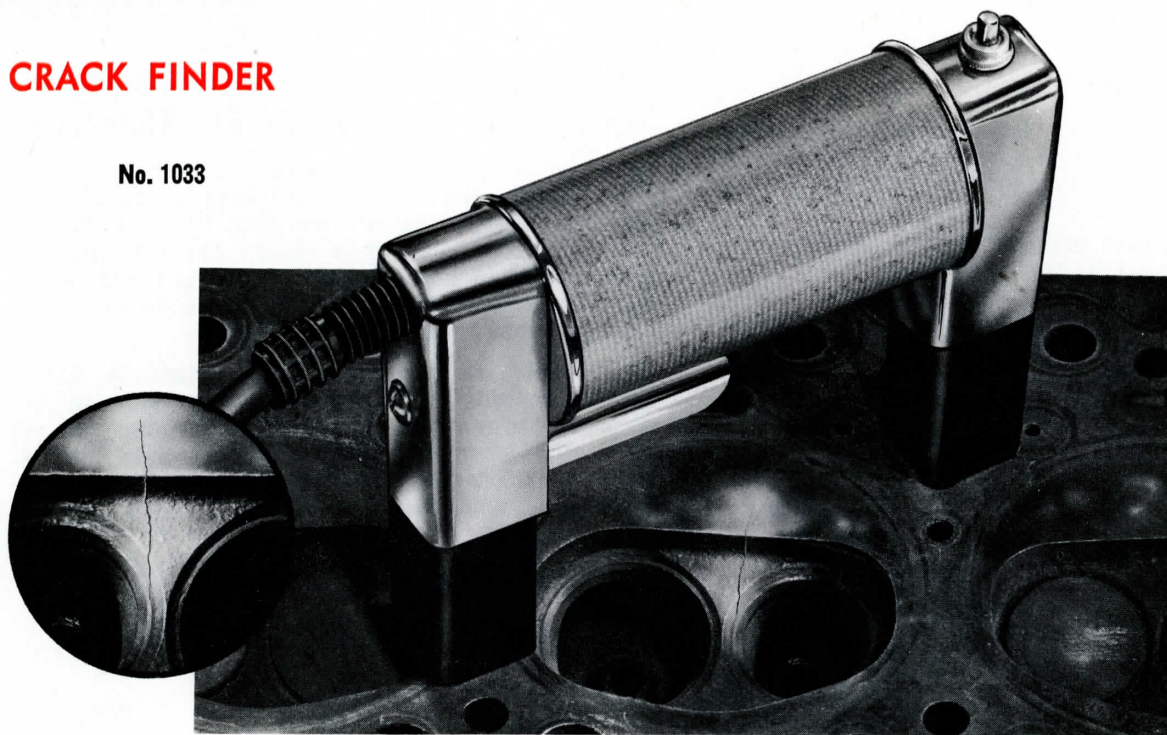
\*SPECIAL—Use On Bronze Liners And New Cast Iron Guides Only.

### PRECISION PILOTED REAMERS

PART NO.	DECIMAL SIZE	MM EQUIVALENT
1692	.236	6MM
1601	.250	
1692A	.276	7MM
1525C	.310	
1525A	.311	
1510	.312	
1692B	.315	8MM
1575	.341	
1525D	.342	
1511	.343	
1525H	.344	
1538	.345	
1692C	.354	9MM
1525E	.371	
1525F	.372	
1505	.373	
1525G	.374	
1512	.375	
1692D	.394	10MM
1674	.406	
1692E	.433	11MM
1517	.437	
1692F	.472	12MM
1518	.500	
1676	.562	

## CRACK FINDER

No. 1033



This extremely useful tool will locate cracks or breaks in cylinder heads, manifolds, blocks, cases or many other parts made of ferrous material. Will find cracks not visible to the naked eye. Will pay for itself many times over. Avoid come backs and trouble jobs due to cracks or breaks. Uses 110 volt A.C. current. (Dual voltage model also available.) Comes complete with instructions, crack powder and storage box.

### Part No.

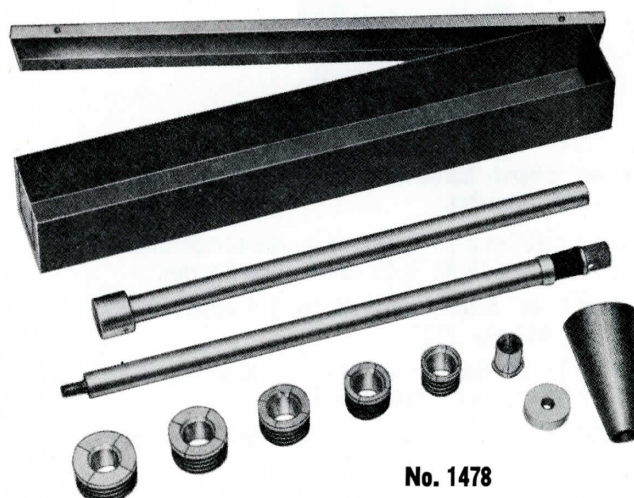
<b>1033</b>	Hastings Crack Finder
<b>1042</b>	Powder (Gray) 1 lb. Jar
<b>1055</b>	Powder (Red) 1 lb. Jar
<b>1064</b>	Atomizer
<b>1068</b>	Powder (Gray) 25 lb. Can
<b>1247</b>	Switch
<b>1252</b>	Light bulb

## UNIVERSAL CAMSHAFT BEARING TOOL

A complete kit of tools to remove or insert camshaft bearings in all engines from compact cars to heavy duty trucks.

Treats bearings gently. The expander unit has a neoprene sleeve over which the split driving plugs are mounted and expanded to size. Each split driving plug has 4 neoprene "O" rings, which together with the neoprene sleeve provide a double shock absorber to prevent damage to new bearings.

Kit includes driving shaft, driving shaft extension, expander unit, 5 driving plugs, 2 driving collars, and centering cone, in metal box. Range: 1.120 inch to 2.690 inch.



No. 1478



## MICRO-KNURLER

- Knurls all types of pistons 1 7/8" to 6 1/4" dia.
- Knurls both sides of piston at once with connecting rod on or off.
- One arm can be locked in place to allow split skirt pistons to be knurled on one side only.
- Power operated by a 1/3 H.P. gear reduction motor.
- Small bore piston cone available, part #1560A.
- Knurl pattern can be applied from 1" to 3" on a 4" piston.
- Complete operating instructions included.
- Oilite bearings assure less friction for trouble free operation.
- Knurl Wheel set No. 1993.



No. 1872

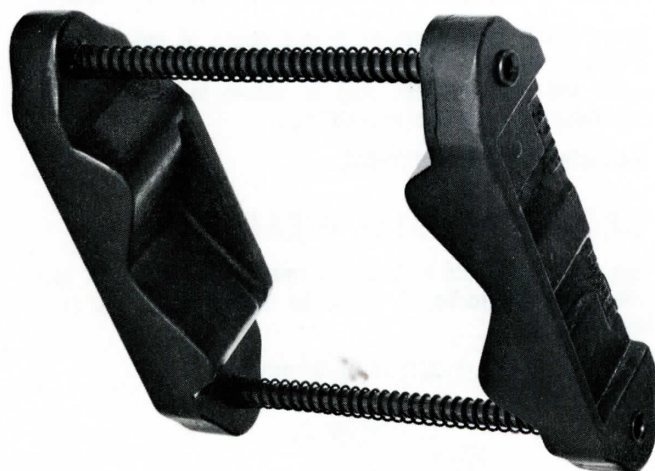
## HASTINGS DIAMOND KNURL PATTERN

Traps and holds more oil for positive lubrication. Assures good break-in without scuffing, scoring, blow-by or piston slap. Micro-Knurling protects pistons, rings, and cylinder walls. Eliminates costly comebacks, makes satisfied customers.

**NEW LIFE FOR OLD PISTONS—EXTEND THE LIFE OF NEW PISTONS WITH HASTINGS MICRO-KNURLING.**

## PISTON VISE

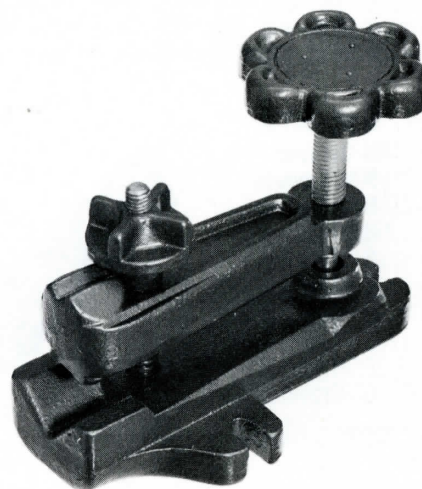
Mounts in any Bench Vise and will hold a piston securely and safely. Spring loaded guides keeps the vise open for ease of piston change when cleaning grooves or installing rings. Adjustable from 1" to 4".



No. 1339

## PIN VISE

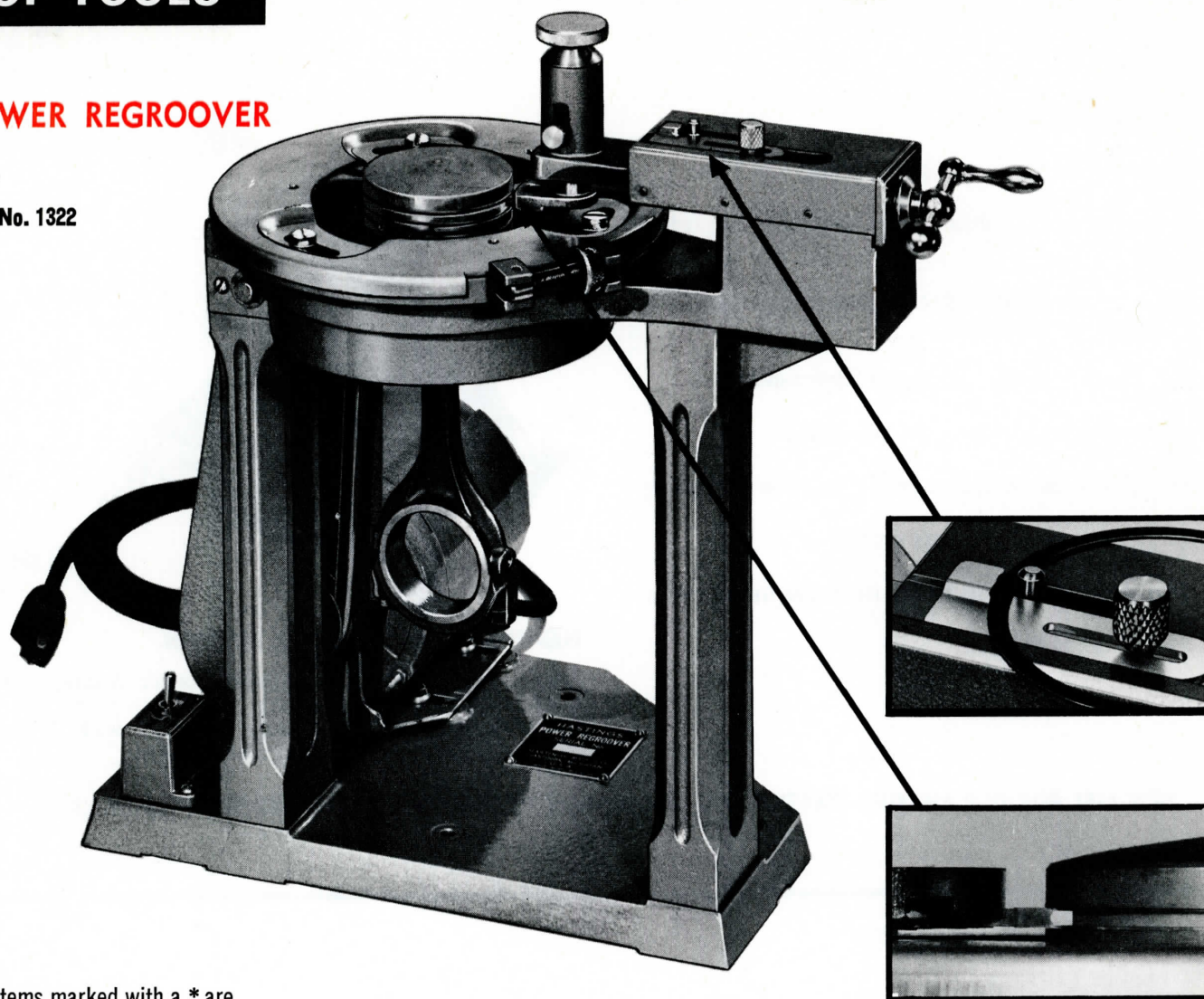
This vise will clamp on a round pin and hold it securely. Good for pin fitting operations or any other operation where a round pin must be held without damage. Can be attached to a bench or used in the hand.



No. 1338

## POWER REGROOVER

No. 1322



Items marked with a \* are supplied with the machine.

A power driven, precision machine that makes installation of top groove spacers a fast, easy job. Does the job in half the time required by old hand operated methods. It saves time—increases profits.

### REPLACEMENT TOOL BITS

- 1634 To Widen 3MM Grooves
- 1635 To Widen 2½ MM Grooves
- 1636 To Widen 2¼ MM Grooves
- 1637 To Widen 1.8MM Grooves
- 1693 To Widen 1/16" Grooves
- \*1481 To Widen 5/64" Grooves
- \*1482 To Widen 3/32" Grooves
- \*1483 To Widen 1/8" Grooves
- \*1484 To Widen 5/32" Grooves
- 1485 To Widen 3/16" Grooves



### REPLACEMENT DRIVE DISCS

- \*1322S for 5/64" Grooves
- \*1322T for 3/32" Grooves
- \*1322U for 1/8" Grooves
- \*1322V for 5/32" Grooves
- 1322W for 1/16" Grooves

The machine regrooves pistons 3 inches to 5 inches diameter with connecting rods on. The machine is mounted on a rugged base and is powered with ¼ HP, 110 AC electric motor. Cutter head assembly holds two cutters for widening 5/64 inch and 3/32 inch width grooves for G L Spacers. Cutters to widen 1/8 inch and 5/32 inch grooves are also supplied with the machine and can be installed in the cutter head assembly in seconds.

Handy depth gauge assures proper depth of cut on piston. Simply insert the spacer as a gauge to determine the proper depth and set automatic stop as shown in the illustration. Automatic stop prevents over cutting.

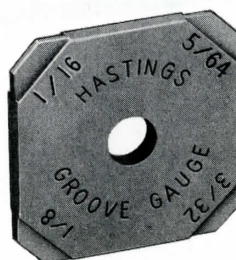
Complete instructions included.

## GROOVE WIDTH WEAR GAUGE

Tips are ground .006 inch over normal groove width. If gauge will enter top groove, it should be machined and GL spacer installed.

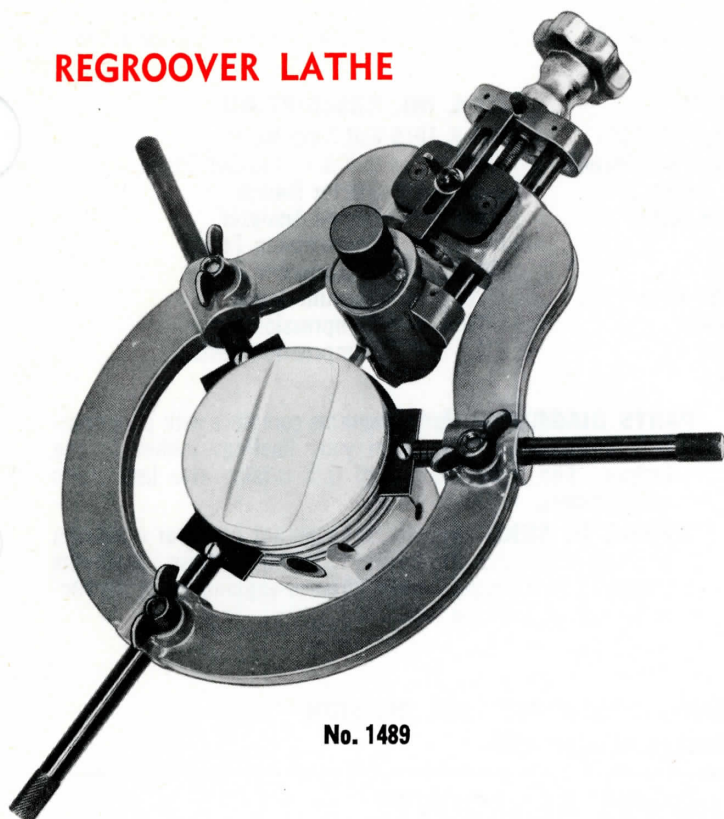
For 1/16", 5/64", 3/32", and 1/8" grooves.

No. 1697





## REGROOVER LATHE



No. 1489

Simple, sturdy, hand tool to widen or remachine ring grooves. Extremely accurate and adaptable for pistons 3 inch to 5 inch diameter.

Guide pin plates run true in ring groove assuring accurate top groove machining.

Ideal for jobber shop or dealer use.

Carbide cutters supplied to install Hastings G I Spacers for 5/64", 3/32" and 1/8" grooves.

Other cutters for wider grooves available.

Complete operating instructions included.

Items marked \* are supplied with tool.

### GUIDE PLATES

- 1489A—1/16" (Set of Three)
- \*1491 —3/32" (Set of Three)
- 1493 —5/64" (Set of Three)
- \*1474 —1/8" (Set of Three)

### No. 1492—PLATE HOLDER SHAFT

#### REPLACEMENT TOOL BITS

- |                                |                              |
|--------------------------------|------------------------------|
| 1630 To Widen 3MM Grooves      | 1447 To Widen 5/64" Grooves* |
| 1631 To Widen 2 1/2 MM Grooves | 1448 To Widen 3/32" Grooves* |
| 1632 To Widen 2 1/4 MM Grooves | 1449 To Widen 1/8" Grooves*  |
| 1633 To Widen 1.8MM Grooves    | 1450 To Widen 5/32" Grooves  |
| 1694 To Widen 1/16" Grooves    | 1451 To Widen 3/16" Grooves  |

## PISTON PIN INSTALLATION GAUGE

(All except Corvair & Rambler)

Adjustable gauge quickly and easily installs and centers rods on interference fit piston pins. Set gauge before disassembling piston and rod assembly.



No. 3197

## ELECTRIC PIN FURNACE

These special furnaces will install connection rod pins without the fear of scoring or cracking pistons. Heat expands the eye of the rod so the piston can be pushed into place by hand pressure. This safe, sure method eliminates the hazards encountered when pins are forced in cold. Both furnaces have temperature indicators and safety automatic timers. 110 V. current is used on both models.



No. 3139



No. 3194

# PARTS AND REPAIR SECTION

Because of their popularity the following tools have a flat rate repair charge. All others will be repaired on a labor plus parts basis. See price list for the repair cost on these tools.

## TOOL NO. DESCRIPTION

1033 & 1035	Crack Finder
3036	Ridge Reamer
1057	Ridge Reamer
1234	Fuel Pump Tester
1253	Coil & Condenser Tester
1254	OHM Meter
1256	Exhaust Analyzer
1295	Ignition Tester
1296	Alternator, Generator, Regulator Tester

## TOOL NO. DESCRIPTION

1519	Speed Reducer for 1525
1519A	Speed Reducer with handle
1578	Dwell Tack Tester
1579	Small Engine Tester
1585	Ridge Reamer
1605	Power Drive
1713 & 1813	Tach & Dwell Meter
1714 & 1814	Tune Up Tester
1716 & 1816	Timing Light
1717 & 1664	Timing Light

## TOOL NO. DESCRIPTION

1743 & 1815	Volt Amp Meter
1718	Coil & Condenser Tester
1721	Starter Switch
1724	Engine Analyzer
1726	Compression Tester
1727	Compression Tester
1728	Vacuum Gauge
1729	Compression Tester
1731	Compression Tester

**REPAIR SERVICE**—Hastings maintains a complete repair department. Tools requiring service can be sent directly to the factory or through your local Hastings jobber.

**WARRANTY REPAIRS**—Tools returned under warranty will be repaired. If this is not possible they will be replaced. The broken part or parts will be replaced rather than the entire tool if practicl.

**REPAIR PARTS**—Individual repair parts are also available for repairs in the field. Parts for current tools are listed in the repair section of this catalog.

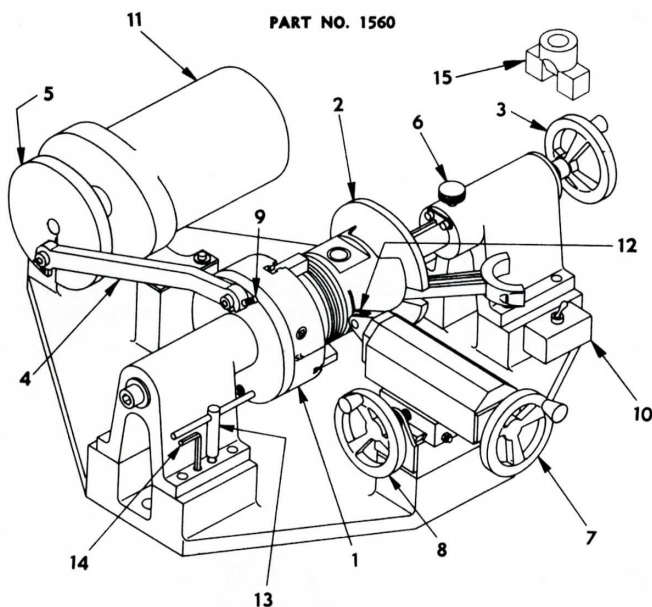
**PARTS DIAGRAMS**—Parts diagrams complete with part numbers are also available from your Hastings jobber or the factory. The repair section of this catalog also lists parts and numbers.

**WHERE TO SEND**—Repairs, requests for parts, or questions on tools should be sent to the following address. All items should be sent postpaid and a letter of explanation or instruction enclosed with the tool.

## HASTINGS MANUFACTURING COMPANY—AUTOMOTIVE TOOL DIVISION

North Hanover Street, Hastings, Michigan 49058

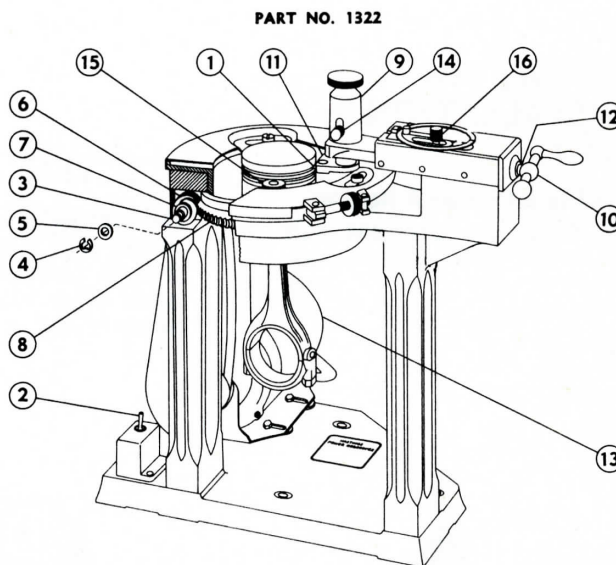
## HASTINGS MICRO-KNURLER Model M2



### Replacement Parts List

(1) Chuck	Part No. 1567
(2) Tail Stock Cone	Part No. 1563
(3) Hand Wheel	Part No. 1570
(4) Adjustable Driving Arm	Part No. 1561
(5) Drive Plate	Part No. 1571
(6) Tail Stock Lock Screw	Part No. 1564
(7) Hand Wheel	Part No. 1570
(8) Hand Wheel	Part No. 1570
(9) Lock-Pin	Part No. 1562
(10) Switch	Part No. 1565
(11) Motor	Part No. 1566
(12) Knurling Wheels (Set)	Part No. 1993
(13) Chuck Wrench	Part No. 1568
(14) Allen Wrench (3/16")	Part No. 1569
(15) Slipper Skirt Piston Support	Part No. 1572
(16) Fibre & Metal Reduction Gear	Part No. 1604

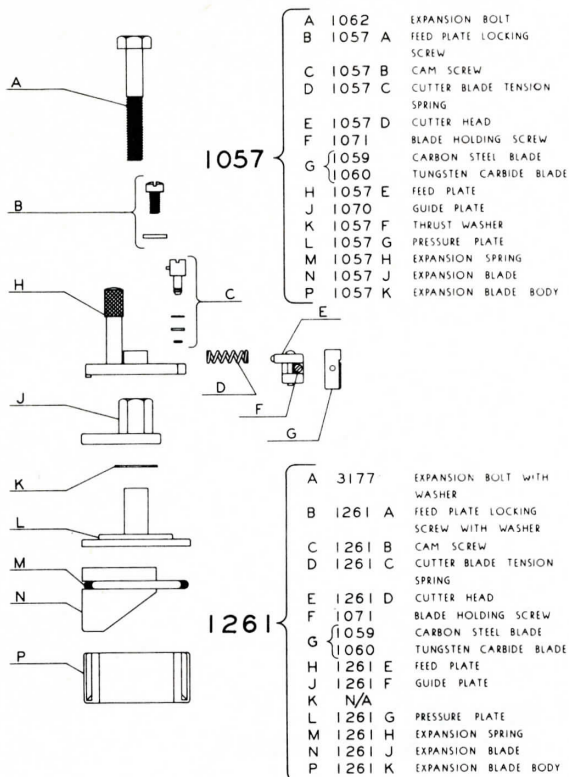
## POWER REGROOVER



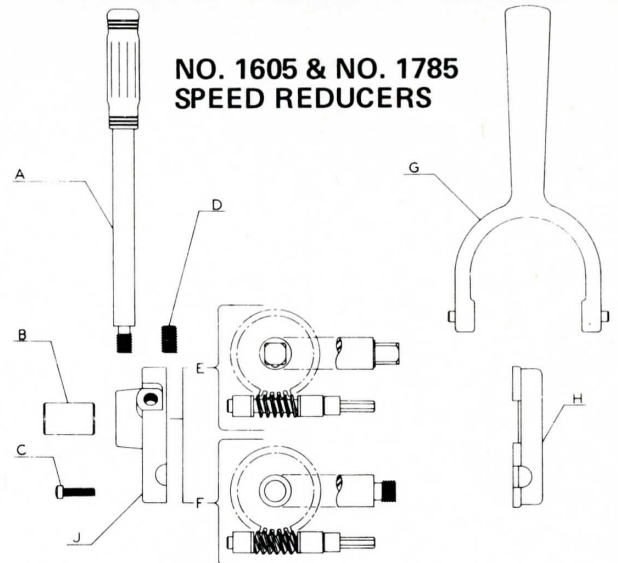
1. Tool Bits supplied with machine	12. Lead Screw for Tool Holder—1322K
1481 to widen 5/64" grooves	13. 1/3 Hp Motor—1322L
1482 to widen 3/32" grooves	14. Cutter Head Lock Screw 1322M
1483 to widen 1/8" grooves	15. Drive Discs supplied with machine
1484 to widen 5/32" grooves	1322S to hold 5/64 width groove pistons
2. Switch—1322A	1322T to hold 3/32 width groove pistons
3. Shaft—1322B	1322U to hold 1/8 width groove pistons
4. Truarc Ring—1322C	1322V to hold 5/32 width groove pistons
5. Spacer—1322D	16. Stop Plate Screw—1322N
6. Worm—1322E	Worm Shaft Key—1322P
7. Oilite Bushing (2)—1322F	
8. Worm Gear—1322G	
9. Tool Holder Slide—1322H	
10. Feed Handle—1322R	
11. Tool Bit Holder—1322J	



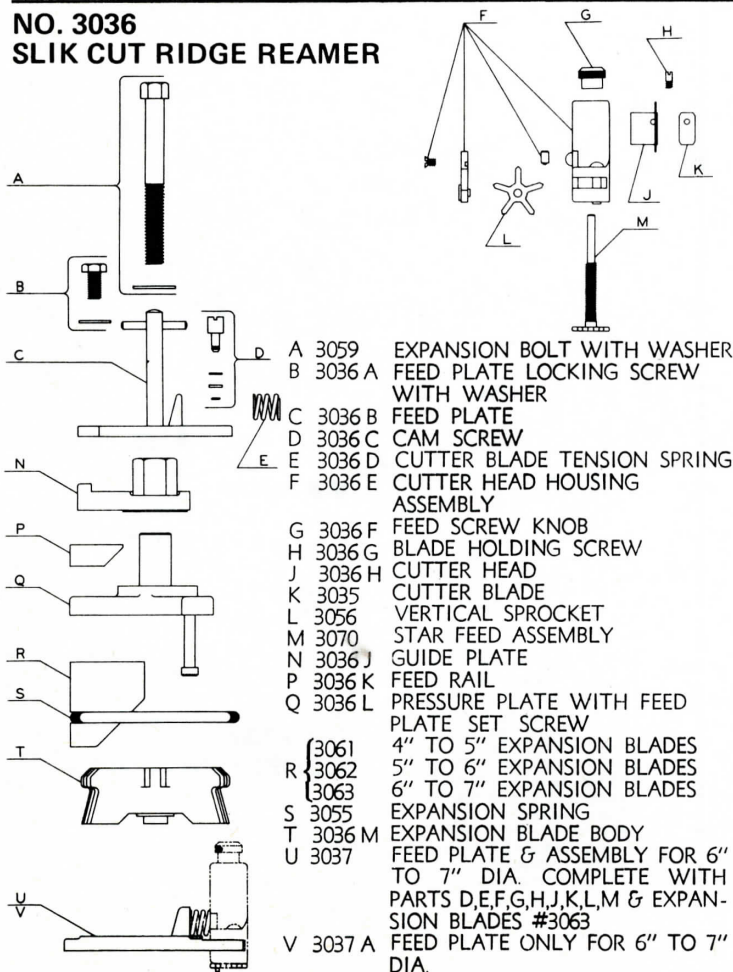
## NO. 1057 & 1261 SAF-T-BLADE RIDGE REAMER



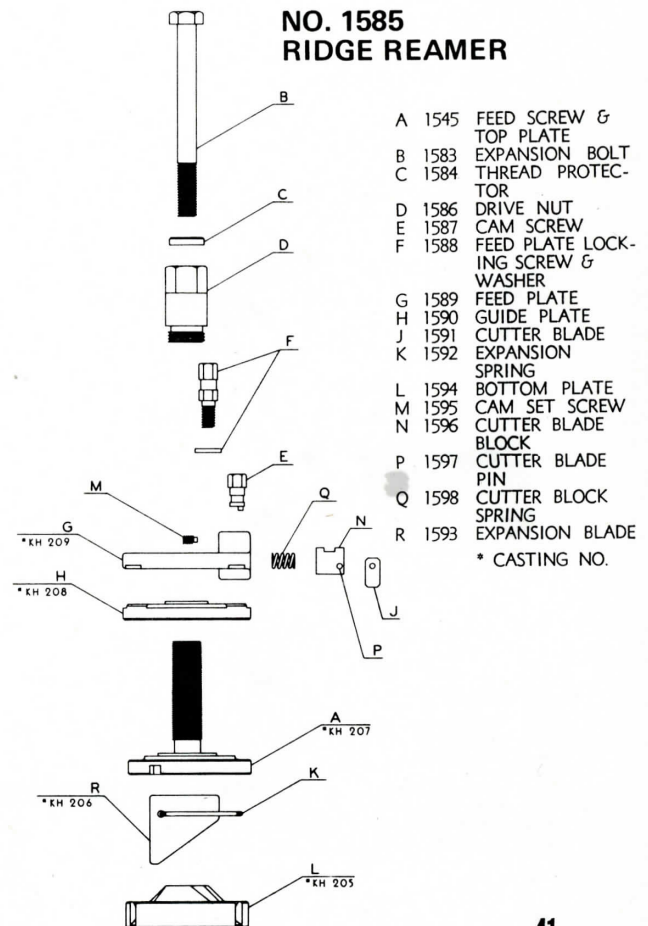
## NO. 1605 & NO. 1785 SPEED REDUCERS

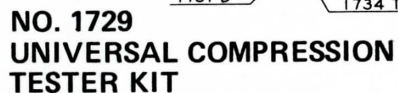


## NO. 3036 SLIK CUT RIDGE REAMER

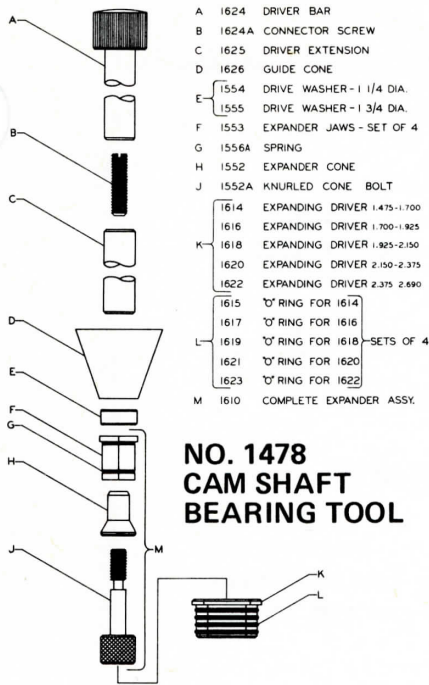


## NO. 1585 RIDGE REAMER

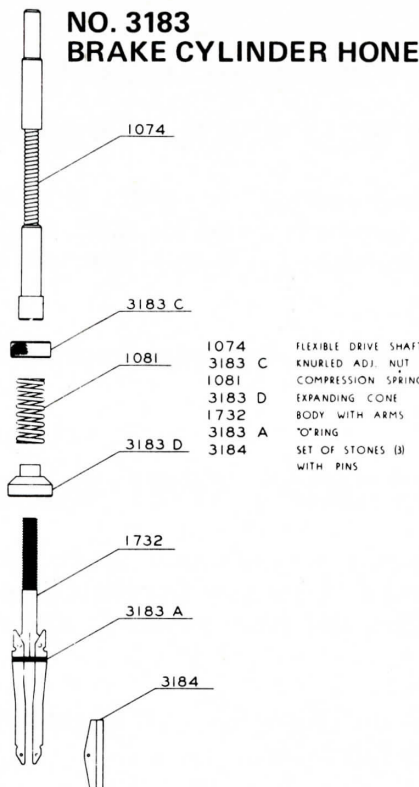




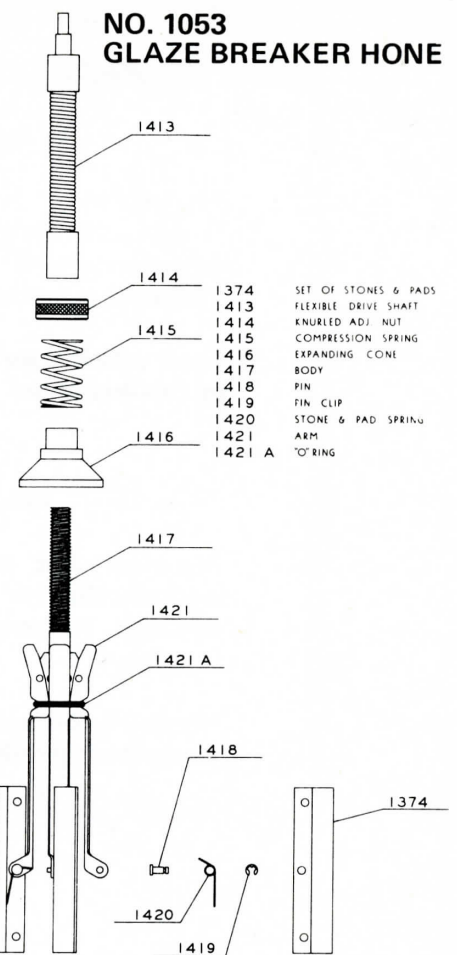




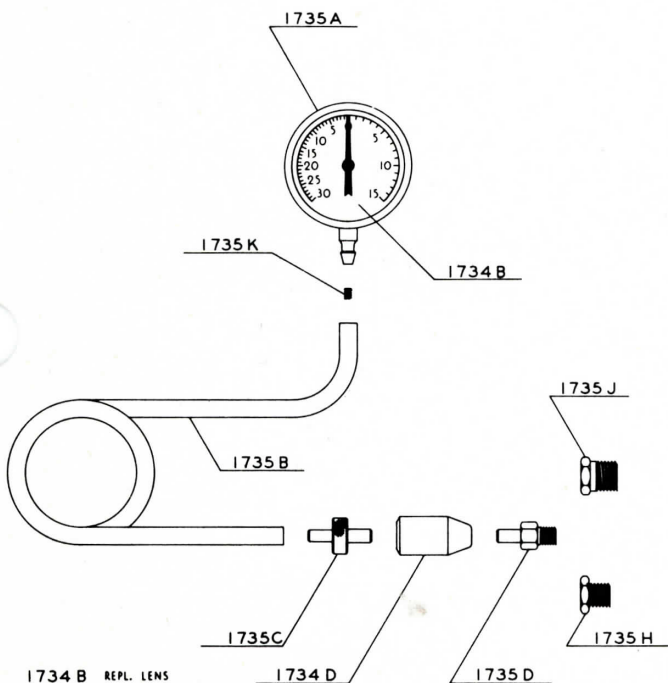
**NO. 1478  
CAM SHAFT  
BEARING TOOL**



1074 FLEXIBLE DRIVE SHAFT  
 3183 C KNURLED ADJ. NUT  
 1081 COMPRESSION SPRING  
 3183 D EXPANDING CONE  
 1732 BODY WITH ARMS  
 3183 A O-RING  
 3184 SET OF STONES (3) WITH PINS

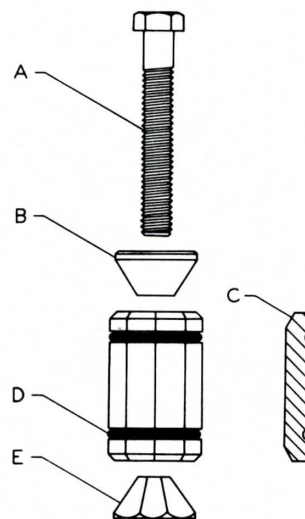


1374 SET OF STONES & PADS  
 1413 FLEXIBLE DRIVE SHAFT  
 1414 KNURLED ADJ. NUT  
 1415 COMPRESSION SPRING  
 1416 EXPANDING CONE  
 1417 BODY  
 1418 PIN  
 1419 PIN CLIP  
 1420 STONE & PAD SPRING ARM  
 1421 O-RING



1734 B REPL. LENS  
 1734 D 14MM CONE  
 1735 A GAUGE HEAD  
 1735 B HOSE  
 1735 C CONE CONNECTOR  
 1735 D ADAPTER CONNECTOR  
 1735 H 1/4NPT ADAPTER (SMALL)  
 1735 J 3/8NPT ADAPTER (LARGE)  
 1735 K NEEDLE DAMPER

**NO. 1728  
ENGINE VACUUM AND  
FUEL PUMP TESTER**



**NO. 1017  
TAILPIPE  
EXPANDER**

A 1017A CENTER BOLT  
 B 1017B UPPER EXPANSION CONE  
 C 1017C EXPANSION BLADE  
 D 1017D SPRING  
 E 1017E LOWER EXPANSION CONE

## **HASTINGS TOOL GUARANTEE**

Hastings tools are guaranteed against defects in material and workmanship. Tools in this category may be returned for repair or replacement, whichever is more economical, as decided by the factory. Electrical equipment is covered by a separate guarantee.

Tools which have been abused, modified or worn out from use are not covered by this guarantee.

## **ELECTRICAL TEST EQUIPMENT**

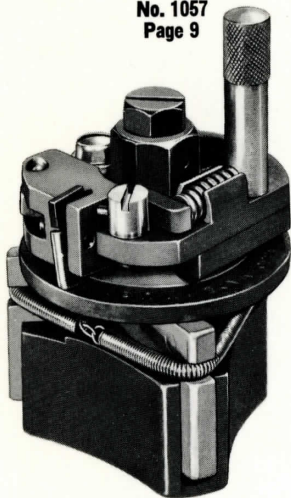
Electrical test equipment is guaranteed against defects in material and workmanship for a period of one year from date of purchase. Test equipment, damaged by overloading the rated capacity, will not be covered by this guarantee.

Electrical components of all other tools will be guaranteed against material and workmanship defects for one year.



Small engine repair is one of the fastest growing services today. Hastings has a complete line of tools to help you cash in on this profitable field. All of these tools are of the highest quality and are engineered for the job. Get the right tool for the job from Hastings. Full description and specifications are listed for these tools in the catalog.

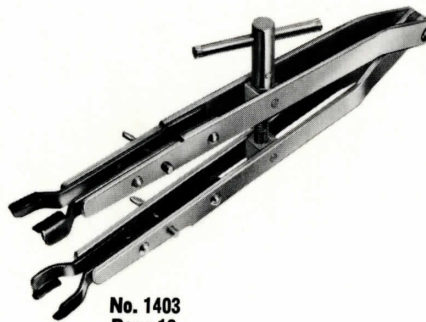
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**No. 1129**  
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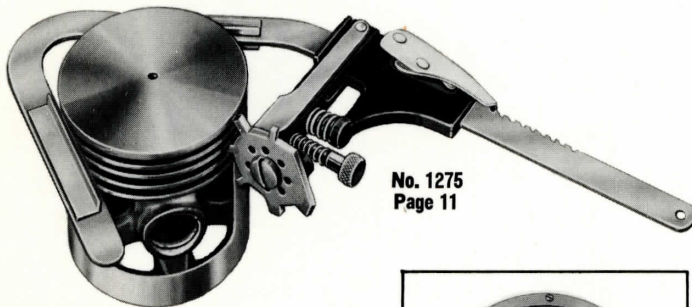
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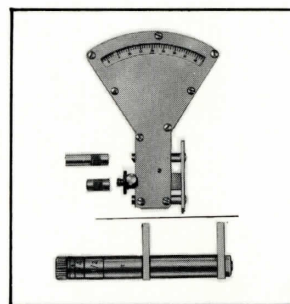
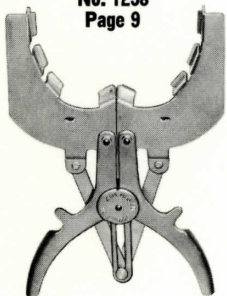
**No. 1113**  
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**No. 1275**  
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**No. 1258**  
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**SMALL BORE CYLINDER GAUGE**  
For 1 1/4" to 3 1/4" Bores

**No. 1424**  
Page 11

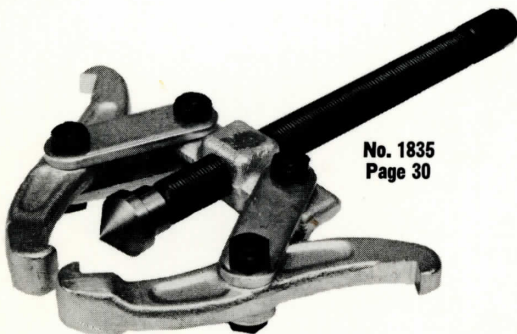
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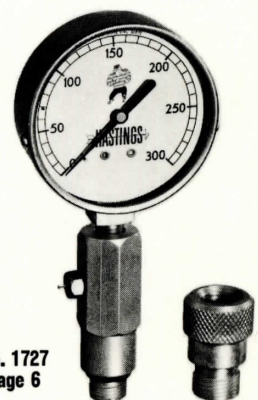
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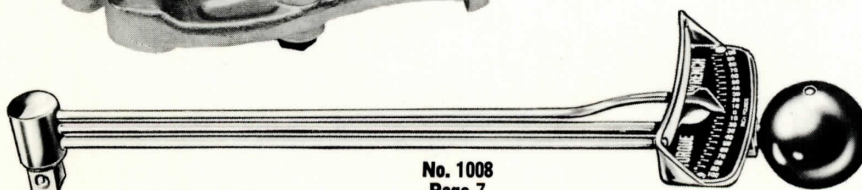
**No. 1835**  
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**No. 1008**  
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# HASTINGS SERVICE TOOL DISPLAY RACK

*Part No. 3293*

It's a fact—field proven time and time again—with this new rotating tool display you sell three times as many mechanic service tools as you would without it. The bright yellow, eye-catching display provides a whopping big 50 square feet of display area—yet takes only a 3-foot square spot of floor space.

It's made of four rugged ¼" pegboard panels mounted on a heavy gauge (1" diam.) tubular steel frame. It supports heavy loads of merchandise and rotates freely on two heavy duty ball bearing assemblies. Legs have non-skid rubber caps to prevent marring of floors.

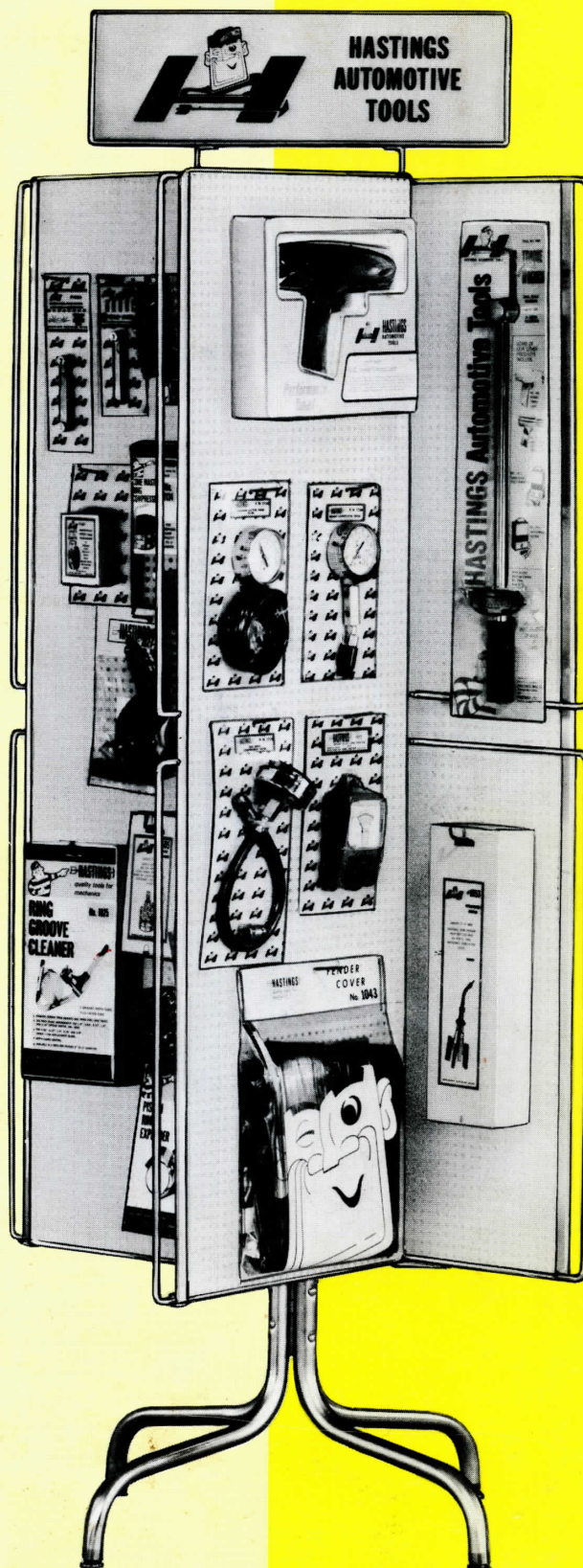


Tools hang on heavy duty hooks which have built-in part-number tabs. The part-numbers are furnished on pressure sensitive labels which fit in the display panels of the hooks. 50 hooks and part-number labels furnished.

Hastings service tools are skin-packed for visual impulse selling. The tools can be arranged on the pegboard in any fashion you like—changed anytime—making it easy to add new tools.

The Hastings rotating display and Hastings tool assortments give you a complete tool merchandising program to meet the needs of every tool buyer.

**Mr. Distributor see your Hastings Salesman for Service Tool Display Program. The More You Show—The More You Sell!**



*Order your Hastings rotating display today!*

**AUTOMOTIVE TOOLS & ACCESSORIES DIVISION**

**HASTINGS MANUFACTURING COMPANY Hastings, Michigan 49058 Phone (616) 945-2491**

**EXPORT SALES INTERNATIONAL GROUP • FEDERAL MOGUL CORPORATION**

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